

MAPPING REPORT

➤ Towards the African Continental
Qualifications Framework





MAPPING REPORT

**Towards the African Continental
Qualifications Framework**



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This report concludes the mapping study of qualifications frameworks in Africa, elaborated in 2020 in the context of the project AU-EU Skills for Youth Employability/Skills Initiative for Africa, Technical Cooperation – Developing the African Continental Qualifications Framework (ACQF).

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Contents

<i>Tables</i>	<i>vi</i>
<i>Figures</i>	<i>vii</i>
<i>Acronyms and abbreviations</i>	<i>viii</i>
EXECUTIVE SUMMARY	1
1. INTRODUCTION AND CONTEXT TO THE MAPPING STUDY	20
1.1 Introduction	21
1.2 African Union policy context	24
1.3 Mapping study methodology	28
1.3.1 Theory of Change approach.....	30
1.3.2 Desktop research	31
1.3.3 Online survey	32
1.3.4 Technical visits to countries and RECs	33
1.3.5 JETStreaming.....	37
1.4 Structure of mapping report and resource tools	37
2. TOWARDS HARMONISATION OF QUALIFICATIONS IN AFRICA	39
2.1 Introduction to global NQF developments.....	40
2.2 Evolution in qualifications frameworks, 1980–2020	42
2.2.1 Period 1: Pre-qualifications frameworks	42
2.2.2 Period 2: Early-generation NQFs.....	42
2.2.3 Period 3: Third-generation NQFs and emergence of RQFs	43
2.2.4 Period 4: Global expansion	43
2.2.5 Period 5: Convergence of methodologies, digitalisation and a search for independent reference points	45
2.3 The origins of qualifications frameworks	47
2.4 Qualifications harmonisation considerations for Africa	48
2.4.1 Learning outcomes as common currency	48
2.4.2 Methodological considerations	55
2.4.3 Towards a consolidated methodology for the transparency and comparability of qualifications in Africa	66
2.5 Overview	70
3. MAPPING QUALIFICATIONS FRAMEWORKS IN AFRICA	71
3.1 Introduction.....	72
3.2 Snapshots of findings from case studies	72
3.2.1 Angola.....	72
3.2.2 Cape Verde.....	73
3.2.3 Cameroon.....	73
3.2.4 Egypt.....	74
3.2.5 Ethiopia	74
3.2.6 Kenya	74
3.2.7 Morocco.....	75
3.2.8 Mozambique	75
3.2.9 Senegal	76

3.2.10	South Africa	76
3.2.11	Togo.....	76
3.2.12	SADC.....	77
3.2.13	ECOWAS.....	77
3.2.14	EAC.....	78
3.3	Mapping the NQFs in Africa	78
3.3.1	Introduction.....	78
3.3.2	Legal and policy bases for qualifications frameworks.....	79
3.3.3	Governance of qualifications frameworks	84
3.3.4	Vision, scope and structure for qualifications frameworks and systems.....	89
3.3.5	Quality assurance	99
3.3.6	Learning outcomes and domains	104
3.3.7	Credit systems.....	108
3.3.8	Qualifications management: Registers, databases and catalogues of qualifications.....	110
3.3.9	Monitoring and evaluation in the context of qualifications frameworks	112
3.3.10	Non-formal and informal learning: Validation and certification	113
3.3.11	Financing	116
3.3.12	Dissemination and communication to end-users	118
3.4	Mapping the RQFs in Africa.....	118
3.4.1	Introduction.....	118
3.4.2	Governance and oversight of RQFs in Africa	119
3.4.3	Scope of RQFs in Africa	121
3.4.4	Quality assurance and RQFs in Africa	122
3.4.5	Referencing and alignment.....	122
3.5	Analysis of a sample of level descriptors from NQFs and RQFs in Africa	123
3.5.1	Qualitative review	124
3.5.2	Analysis of level descriptors based on progression across domains	130
3.5.3	Observations	135
3.6	Analysis of a sample of African qualifications	135
3.6.1	Hospitality.....	137
3.6.2	Accounting	138
3.6.3	Coding	141
3.7	Closing comments	144
4.	INTERNATIONAL CONSIDERATIONS	145
4.1	Introduction	146
4.2	New qualifications framework developments across the Middle East, Asia, Europe and North America	146
4.2.1	Middle East	146
4.2.2	Europe.....	148
4.2.3	Asia.....	149
4.2.4	Caribbean.....	149
4.2.5	Pacific.....	150
4.3	Progress with referencing and alignment of African qualifications frameworks	152
4.4	Recognition beyond qualifications frameworks	154
4.4.1	Credential evaluation	155
4.4.2	Regional conventions	156

4.4.3	Trade and related recognition agreements.....	156
4.4.4	Professional standards and occupational licensing	157
4.4.5	Classification systems	157
4.4.6	World Reference Levels.....	158
4.4.7	Other forms of recognition	158
4.5	Diverse landscape of qualifications frameworks and systems on the continent.....	159
4.5.1	Countries with links to French traditions in education and training.....	160
4.5.2	Countries with Portuguese traditions in education and training.....	163
4.6	Overview	164
5. LOOKING TO THE NEXT PHASE OF QUALIFICATIONS HARMONISATION IN AFRICA		166
5.1	Introduction	167
5.2	Opportunities and limitations associated with the mapping study	167
5.2.1	Organising framework	168
5.2.2	Theory of Change	168
5.2.3	Desk research	168
5.2.4	Online survey	169
5.2.5	Technical field visits	169
5.2.6	Peer learning and exchanges among actors of African NQFs	169
5.2.7	Stakeholder consultations	170
5.2.8	Analysis of qualifications	170
5.2.9	Comparison of level descriptors.....	171
5.3	Findings of the mapping study.....	172
5.3.1	Considerations for qualifications development in member states	172
5.3.2	Considerations for regional qualifications frameworks in Africa	180
5.3.3	Considerations for the future	183
5.4	Concluding remarks.....	184
<i>Annexure 1: African member states and regional economic communities.....</i>		<i>185</i>
<i>Annexure 2: Sources and definitions.....</i>		<i>187</i>
<i>Annexure 3: Examples of African harmonisation initiatives.....</i>		<i>195</i>
<i>Annexure 4: Innovative financing mechanisms.....</i>		<i>198</i>
<i>Bibliography.....</i>		<i>200</i>

Tables

Table 1:	Overview of RQF-NQF referencing processes	11
Table 2:	Differentiated support to countries to develop NQFs	17
Table 3:	Sampling framework with responses from the online survey	33
Table 4:	Country and REC selections	35
Table 5:	Functions and rationales of national and regional qualifications frameworks	41
Table 6:	Harmonisation categories.....	52
Table 7:	Qualifications comparison criteria used by CEDEFOP (2016).....	55
Table 8:	Morocco NQF level 6 descriptors.....	58
Table 9:	Domains and sub-domains of level descriptors	60
Table 10:	Revised Bloom's Taxonomy	61
Table 11:	Dreyfus Model of Skills Acquisition	62
Table 12:	SADC alignment criteria	65
Table 13:	Dimensions of referencing	66
Table 14:	Harmonisation options in Africa	67
Table 15:	Selection of qualifications for further analysis	69
Table 16:	Sub-systems and levels of education and training in Angola	91
Table 17:	Overview of the education system of Cameroon	92
Table 18:	NQF levels in Cape Verde	93
Table 19:	Ethiopian NQF	94
Table 20:	Kenyan NQF.....	95
Table 21:	Moroccan NQF	96
Table 22:	Mozambique's unified NQF (proposal of October 2019, under discussion)	97
Table 23:	South African NQF with sub-frameworks.....	98
Table 24:	Progression in the Cape Verde comprehensive NQF (extract of levels 1–4).....	124
Table 25:	Progression from level 1 to 4: NVQF cases of The Gambia and Senegal	125
Table 26:	Progression from level 1 to 4: Case of Ghana NTVETQF	126
Table 27:	Framework for recognition and equivalence of certificates in the ECOWAS region	127
Table 28:	Sample of African qualifications selected for the development of qualifications profiles	136
Table 29:	Status of development of qualifications frameworks cooperating under the umbrella of the Arab Qualifications Framework.....	147
Table 30:	Arab Qualifications Framework	148
Table 31:	International regional qualifications framework developments	151
Table 32:	Summary of international RQF-NQF referencing processes.....	153

Figures

Figure 1: Draft Theory of Change for the ACQF	31
Figure 2: Match of national qualifications profiles to ESCO (combining occupational-specific and transversal skills and competences)	56
Figure 3: SOLO taxonomy	61
Figure 4: Legal and policy process followed to develop NQFs	81
Figure 5: Legal basis of NQFs.....	81
Figure 6: Responsible for overarching policy matters related to the NQF	85
Figure 7: Scope of NQFs	89
Figure 8: Inclusion of non-formal and informal learning in NQFs	90
Figure 9: Quality assurance mechanisms linked to the NQF.....	100
Figure 10: Learning domains used in level descriptors of NQFs (online survey)	107
Figure 11: Use of credit systems	109
Figure 12: Progression in competence and autonomy across levels.....	128
Figure 13: Three types of qualifications frameworks and their learning domains	129
Figure 14: Analysis of level descriptors from a selection of NQFs in Africa (Botswana, Cape Verde, Egypt, Kenya, Mozambique and Senegal)	132
Figure 15: Analysis of level descriptors from the SADC RQF and EAQFHE.....	134
Figure 16: Match of a sample of national hospitality qualifications profiles to ESCO.....	138
Figure 17: Match of a sample of national accounting qualifications profiles to ESCO	140
Figure 18: Match of a sample of national coding course profiles to ESCO	143
Figure 19: Anglophone and francophone views of NQFs and qualifications	162

Acronyms and abbreviations

AAU	Association of African Universities www.aau.org
ACQF	African Continental Qualifications Framework
ADEA	Association for the Development of Education in Africa www.adeanet.org
AEAA	African Education Accreditation Agency
AfCFTA	African Continental Free Trade Area
AHERS	African Higher Education and Research Space
AMU	Arab Maghreb Union
ANAQ-SUP	Autorité Nationale d'Assurance Qualité, de l'Enseignement Supérieur, de la Recherche et de l'Innovation du Sénégal http://www.anaqsup.sn/
ANEAQ	Agence Nationale de l'Évaluation et d'Assurance Qualité de l'Enseignement Supérieur et de la Recherche Scientifique https://www.aneaq.ma/en/aneaq_en/
ANEP	National Authority of Professional Education http://www.anep.gov.mz/
ANPE	Agence Nationale pour l'Emploi
ANQA	Angola National Qualifications Authority
APC	Approche par Compétences
APSEA	Association of Professional Societies in East Africa www.apsea.or.ke
AQF	Arab Qualifications Framework
AQRF	ASEAN Qualifications Reference Framework asean.org
AQRM	African Quality Rating Mechanism
AQVN	African Qualifications Verification Network
ARES	Agência Reguladora do Ensino Superior
ASEAN	Association of Southeast Asian Nations asean.org
ASG-QA	African Standards and Guidelines for Quality Assurance
ASPYEE	Africa's Platform for Youth Employment and Entrepreneurship
AU	African Union au.int
AUC	African Union Commission au.int/en/commission
BMZ	Federal Ministry of Economic Development and Cooperation
BQF	Bahrain Qualifications Framework
CAMES	Conseil Africain et Malgache pour l'Enseignement Supérieur www.lecames.org
CANTA	Caribbean Association of National Training Agencies
CARICOM	Caribbean Community caricom.org
CBET	Competence-Based Education and Training
CDACC	Curriculum Development, Assessment and Certification Council www.tvetcdacc.go.ke
CEDEFOP	European Centre for the Development of Vocational Training www.cedefop.europa.eu
CEN-SAD	Community of Sahel-Saharan States
CESA	Continental Education Strategy for Africa
CF	Credentials Framework
CFMI	Training Centre for Industry Trades
CGEM	General Confederation of the Enterprises of Morocco www.unescwa.org/general-confederation-moroccan-enterprises
CHE	Council on Higher Education www.che.ac.za

CNAQ	Conselho Nacional de Avaliação de Qualidade do Ensino Superior http://www.cnaq.ac.mz/
CNEP	National Commission of Professional Equivalences
CNQ	National Catalogue of Qualifications https://snq.cv/
CNQP	National Catalogue of Professional Qualifications www.anep.gov.mz/QUALIFICAÇÕES/Qualificações
COMESA	Common Market for Eastern and Southern Africa
COTVET	Council for Technical and Vocational Education and Training
CSEFRS	Higher Council for Education, Training and Scientific Research www.csefrs.ma
CTIQ	Interministerial Technical Committee for Qualifications
CTMP	Continental Teacher Mobility Protocol
CUE	Commission for University Education www.cue.or.ke
DECC	Directorate of Examinations, Competitions and Certifications
DFP	Department of Professional Training
DRC	Democratic Republic of the Congo
DSETS	Document of Strategy of the Education and Training Sector 2013–2020
EAC	East African Community
EAQFHE	East African Qualifications Framework for Higher Education
ECCAS	Economic Community of Central African States au.int/en/recs/eccas
ECOWAS	Economic Community of West African States www.ecowas.int
ECTS	European Credit Transfer System
EHEA	European Higher Education Area
ENQF	Egyptian National Qualifications Framework
EQF	European Qualifications Framework
ESCO	European Skills, Competences, Qualifications and Occupations https://europa.eu/europass/en/european-qualifications-framework-efq
ESTP	Education System, Technical Teaching and Vocational Training
ETF	European Training Foundation www.etf.europa.eu
ETQF	Ethiopian TVET Qualifications Framework
EU	European Union
FKE	Federation of Kenya Employers www.fke-kenya.org
GE	General Education
GFETQSF	General and Further Education and Training Qualifications Sub-Framework
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GSQF	Gambian Skills Qualifications Framework
HAQAA	Harmonisation of African Higher Education Quality Assurance and Accreditation
HE	Higher Education
HEI	Higher Education Institution
HEQSF	Higher Education Qualifications Sub-Framework
HERQA	Higher Education Relevance and Quality Agency www.herqa.edu.et
HESC	Higher Education Strategy Centre
ICT	Information and Communications Technology
IEFP	Institute of Employment and Vocational Training
IGAD	Intergovernmental Authority on Development igad.int

IICBA	International Institute for Capacity Building in Africa
ILO	International Labour Organisation www.ilo.org
INAAREES	Instituto Nacional de Avaliação Acreditação e Reconhecimento de Estudos do Ensino Superior
INEFOP	Instituto Nacional de Emprego e Formação Profissional
IOM	International Organisation for Migration
ISCED	International Standard Classification of Education
ISCO	International Standard Classification of Occupations
IUCEA	Inter-University Council for East Africa iucea.org
JET	JET Education Services
KEBS	Kenya Bureau of Standards www.kebs.org
KICD	Kenya Institute of Curriculum Development kicd.ac.kem
KNCCI	Kenya National Chamber of Commerce and Industry www.kenyachamber.or.ke
KNCES	Kenya National Classification of Education Standard
KNLRD	Kenya National Learner Record Database
KNOCS	Kenya National Occupational Classification Standard
KNQA	Kenya National Qualifications Authority www.knqa.go.ke
LLL	Lifelong Learning
LMD	Licence Master Doctorat
MCTESTP	Ministry of Science and Technology, Higher and Technical Vocational Education
MENFPESRS	Ministry of National Education, Professional Training, Higher Education and Scientific Research
METFP	Ministry of Technical Education and Vocational Training
MINEFOP	Ministry of Employment and Vocational Training
MINESEC	Ministry of Secondary Education
MOOC	Massive Open Online Course
MoHEST	Ministry of Higher Education, Science and Technology
MQA	Mauritius Qualifications Authority www.mqa.mu
MRA	Mutual Recognition Agreements
MSEA	Micro and Small Enterprise Authority www.msea.go.ke
NAQAAE	National Authority for Quality Assurance and Accreditation in Education
NAQMIS	National Qualifications Management Information System
NITA	National Industrial Training Authority www.nita.go.ke
NLRD	National Learners' Records Database
NQA	National Qualifications Authority
NQCF	National Qualification and Certification Framework
NQF	National Qualifications Framework
NQS	National Qualifications System
NTQF	National TVET Qualifications Framework
NTVETQF	National Technical and Vocational Education and Training Qualifications Framework
NUFFIC	Centre for International Recognition and Certification
NVQF	National Vocational Qualifications Framework
OECD	Organisation for Economic Co-operation and Development www.oecd.org
OFO	Organising Framework for Occupations

O*NET	Occupational Information Network
OQSF	Occupational Qualifications Sub-Framework
PAQAF	Pan-African Quality Assurance and Accreditation Framework
PAQUET	Programme for Improving Quality, Equity and Transparency
PAU	Pan African University
PDN	National Development Plan
PEACCM	Protocol on the East African Community Common Market
PQF	Pacific Qualifications Framework prqs.spc.int
PRQS	Pacific Register of Qualifications and Standards
QA	Quality Assurance
QC	Quality Council
QCTO	Quality Council for Trades and Occupations www.qcto.org.za
QNQP	National Professional Qualifications Framework
QRF	Qualifications Reference Framework
QQI	Quality and Qualifications Ireland
QUANQES	Qualifications Framework for Higher Education
REC	Regional Economic Community
REM-REC	Répertoire Emploi-Métier-Référentiel Emploi-Compétences
RPL	Recognition of Prior Learning
RQF	Regional Qualifications Framework
RVCC	Recognition, Validation and Certification of Competences
SAAEA	Southern African Association for Educational Assessment
SADC	Southern African Development Community www.sadc.int
SADCQF	SADC Qualifications Framework
SADCQVN	SADC Qualifications Verification Network
SARUA	Southern African Regional Universities Association www.sarua.org
SAQA	South African Qualifications Authority www.saqa.org.za
SAQAN	Southern African Quality Assurance Network www.saqan.org
SDG	Sustainable Development Goal
SETA	Sector Education and Training Authority
SIFA	Skills Initiative for Africa
SINAQES	National System of Evaluation, Accreditation and Quality Assurance
SNACEP	System of Registration, Evaluation, Accreditation and Quality Assurance of Professional Education
SNATCA	National System of Credit Accumulation and Transfer
SNE	National Education System
SNETFP	National Strategy for Technical Education and Vocational Training
SNFP	Sistema Nacional de Formação Profissional
SNQ	National Qualifications System
SOLO	Structure of the Observed Learning Outcome
SQA	Seychelles Qualifications Authority www.sqa.sc
TCCA	Technical Committee on Certification and Accreditation
TCDF	TVET Curriculum Development Framework
ToA	Theory of Action
ToC	Theory of Change
TQF	Transnational Qualifications Framework
TVET	Technical and Vocational Education and Training

TVETA	Technical and Vocational Education and Training Authority www.tveta.go.ke
UC-SNQ	Coordination Unit of the National Qualifications System https://snq.cv
UIL	UNESCO Institute for Lifelong Learning
UNESCO	United Nations Education, Scientific and Cultural Organisation www.unesco.org
UNISA	University of South Africa www.unisa.ac.za
UTG-PNFQ	Unidade Técnica de Gestão do Plano Nacional de Formação de Quadros
VAE	Validation des Acquis de l'Expérience
VET	Vocational Education and Training
VNFIL	Validation of Non-formal and Informal Learning
VUSSC	Virtual University of the Small States in the Commonwealth
WAEC	West African Examinations Council
WAEMU	West African Economic and Monetary Union www.uemoa.int
WRL	World Reference Level worldreferencelevels.org

EXECUTIVE SUMMARY

Introduction to the mapping study

The African Continental Qualifications Framework (ACQF) is a policy initiative of the African Union (AU) and its development process started in 2019, building on a wide range of ongoing continental processes, specifically Agenda 2063 (AUC, 2015b), the Continental Education Strategy for Africa (CESA) (AUC, 2015a; AUC, 2019c), and more recently also the Agreement Establishing the African Continental Free Trade Area (AfCFTA) (AUC, 2019b). The current vision for the ACQF is to enhance comparability, quality and transparency of qualifications from all sub-sectors and levels of education and training; to facilitate recognition of diplomas and certificates, and mobility of learners and workers; to work in complementarity with national and regional qualifications frameworks; to support developments at national and regional levels; and to promote cooperation and alignment between qualifications frameworks (national and regional) in Africa and worldwide (AUC, 2019d). To this end, the ACQF aims to be inclusive and comprehensive, open to innovation and new technologies, and based on learnings from similar processes in Africa and globally.

The mapping study was commissioned by the AU-EU Skills for Youth Employability Programme/Skills Initiative for Africa (SIFA), Technical Cooperation – Developing the African Continental Qualifications Framework, a partnership of the African Union Commission (AUC) with the European Union (EU), the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and the European Training Foundation (ETF). The programme was launched in June 2019, and the inaugural workshop of the ACQF development component took place on 2–4 September 2019 at the headquarters of the AU in Addis Ababa.

This ACQF mapping report presents the key findings of the mapping study of qualifications framework development in African countries, conducted from September 2019 to September 2020, covering qualifications frameworks/systems at different stages of development, consolidation and implementation. The primary audiences for this report are policymakers, practitioners and researchers working on qualifications frameworks and systems on African, regional and country levels. This mapping report is the first of a three-part process and will be followed by the analysis of options and scenarios for the ACQF (2020–21), and development of the ACQF policy and technical document and action plan (2021–22), accompanied by an action plan and technical guidelines.

The ACQF mapping study integrates the knowledge and data collected through a combination of sources, in accordance with the overarching ACQF project planning document, ‘Developing the ACQF: Scope of work and roadmap 2019–2022’ (ACQF, 2019), and the ‘Terms of reference’ (GIZ, 2019). The sources include: 1) online survey; 2) deeper analyses at country and regional level; and 3) desktop research. The ACQF peer learning webinars conducted from July to October 2020 provided further sources of updated information on the ongoing dynamics and initiatives of national and regional qualifications frameworks in Africa, such as new legislation, national consultation processes and National Qualifications Framework (NQF) development projects. In the context of the Covid-19 pandemic, these seven peer learning webinars replaced the originally planned conventional ACQF workshops, and allowed the ACQF stakeholders to stay connected, aware and informed. For deeper understanding, it is recommended that the reports and analyses contributing to this study are also read, namely: a) the online survey report, which analysed data gathered from the first round of the survey; b) thirteen country reports (Angola, Cameroon,

Cape Verde, Egypt, Ethiopia, Ivory Coast, Kenya, Morocco, Mozambique, Nigeria, Senegal, South Africa and Togo) and three Regional Economic Community (REC) reports available online – the East African Community (EAC), the Economic Community of West African States (ECOWAS) and the Southern African Development Community (SADC). To continue the establishment of a wide database of evidence on NQF-related developments, the ACQF project began a process of elaboration of two new country reports (Ivory Coast and Nigeria) as this mapping report was being completed.

This mapping study (and the associated country and REC reports) pioneers the publication of analysis on qualifications frameworks and qualifications systems of a number of African countries which were not included in the recent editions of the global inventories of qualifications frameworks (CEDEFOP et al., 2017b, 2019b). These countries include Angola, Cameroon, Cape Verde, Mozambique, Senegal and Togo, as well as the EAC. The projection into the public domain of information on these countries' dynamics to build and/or improve their qualifications frameworks has enriched our knowledge of the diversity of relevant approaches in the different cultural and regional contexts of the continent. This is a fundamental issue for the ACQF development process further on.

Most importantly, in the period of the mapping study, there was progress at national levels. Several countries have taken steps to move forward with their processes of reflection, analysis and dialogue to develop qualifications frameworks. Countries such as Angola, Guinea-Bissau, Sierra Leone and Somalia are actively engaging with the development of their national qualifications frameworks. There are also examples of substantial improvements to utilise digital tools to manage and disseminate updated information on qualifications of all levels and types. There are countries celebrating their newly adopted NQFs through popular events and training workshops, such as in Lesotho, where the NQF was officially approved as recently as June 2019. Eswatini has the youngest of the African NQFs, approved in August 2020.

It is important to mention that while the fieldwork and baseline research for this study were largely completed by March 2020, the report itself was prepared during the peak of the Covid-19 pandemic internationally, which had not left the African continent untouched (ADEA, 2020). Of relevance to this study was the impact the pandemic had on learning and the recognition of learning. Much will probably still be said about this for many years to come, but what stood out even during this early stage, was the increasing shift towards online learning and more agile ways to conduct quality assurance and recognise learning.

This mapping report includes numerous hyperlinks, both within the report and to external sources. In addition, the mapping report provides a set of online tools and templates for policymakers and researchers working in this discipline: ACQF inventory; Analytical framework of national and regional qualifications frameworks in Africa; ACQF qualifications profiles; and Analysis of level descriptors.

Methodology and scope of the mapping study

The mapping study was designed according to eleven thematic areas, which provided the conceptual framework in which the analysis took place, elaborated in the overarching ACQF project planning document (ACQF, 2019) and in the terms of reference (GIZ, 2019). The themes covered the key policy and technical areas in which qualifications frameworks develop and are implemented, namely:

- › Legal, policy base of the qualifications frameworks: legal acts and policies that underpin the qualifications framework.

- Governance: leading institutions and key agencies; the role of social partners and other stakeholders; partnerships with sector councils; resources; indicators and mechanisms to support implementation and monitoring.
- Vision, scope and structure of qualifications frameworks: objectives and added value for education and training systems; employability policies; levels and descriptors; scope (partial, comprehensive coverage of levels/sub-sectors of education and training; place of non-formal, informal learning and validation/recognition of prior learning).
- Quality assurance (QA): principles, policy, institutions; practice; registers; verification mechanisms.
- Learning outcomes: concepts; application/use in different contexts (qualifications standards, curriculum, assessment) and sub-sectors (vocational education and training [VET], higher education); links with QA.
- Credit systems: concepts; specifications; transferability/pathways between technical and vocational education and training (TVET) and higher education qualifications; status of development/implementation.
- Alignment and referencing: objectives; approaches; criteria; and status of implementation.
- Databases and registers of qualifications: types; uses; target users; governance; involved agencies.
- Costs and financing of NQFs and Regional Qualifications Frameworks (RQFs).
- Dissemination, communication to end-users: learners; employers; education and training providers; career guidance advisors, employment/recruitment agencies; mechanisms; practice; platforms; use of digital tools.
- Role and place of RQFs in supporting development at national level: clarity of learning pathways and permeability; promoting mutual trust; use of common QA principles/mechanisms; use of learning outcomes; renewal and reform of qualifications; improved methods and approaches for better qualifications; other aspects of the ecosystem of education and training (efficiency, effectiveness).

These eleven thematic areas may provide a useful structure for the next phases of the ACQF development project in designing the ACQF policy and technical document, making sure that all key dimensions are taken into account. In developing the mapping study, these dimensions provided a useful organising mechanism for the structuring of the survey instrument, the country and REC reports, and the mapping report itself.

Countries and RECs were selected for the technical visits based on four criteria, namely: 1) coverage all four languages (Arabic, English, French and Portuguese); 2) coverage of different stages of development and/or implementation of NQFs; 3) coverage of different African geographical regions; and 4) RECs with more tangible development of their RQFs.

A theory of change approach was utilised, drawing on the CESA indicators (AUC, 2016) for the existence of NQFs, as well as inbound and outbound mobility ratios. Eleven organising themes, ranging from legal and policy bases, to governance, to the role and place of RQFs in supporting development at national level, formed the basis for the reporting and the synthesis of findings from the various sources of data. Further iterations of the theory of change are proposed as the ACQF process unfolds. A selection of qualifications (in accounting, hospitality and coding) were analysed, as well as level descriptors across the NQFs and RECs (from Kenya, Senegal, Cape

Verde, Botswana, Mozambique, Egypt, SADC and the EAC). These additional elements were integrated into this mapping report, together with the data collected during the desktop research, field visits and the online survey.

The mapping study design opened new opportunities within the limits of the scope of work. The application of the thematic areas highlighted those that are well described and have accessible information (such as governance, objectives, scope and structure of NQFs, QA, use of learning outcomes, registers and databases of qualifications), as well as areas with much more limited information (such as financing and end-user communication).

Harmonisation of qualifications in Africa

The mapping study starts from the 2007 definition of a qualifications framework (Tuck, 2007, p. v) as an 'instrument for the development, classification and recognition of skills, knowledge and competencies along a continuum of agreed levels. It is a way of structuring existing and new qualifications, which are defined by learning outcomes.' The mapping study recognises other more recent definitions, which reflect the most recent developments and national contextual situations. From here, the evolution in qualifications frameworks between 1980 and 2020 is discussed, and five main periods identified. The analysis suggests that the fifth and most recent period is pointing towards more global reference points, as well as a greater orientation towards technology easing access to more flexible learning modalities and pathways, but also a removal of the traditional boundaries between formal, non-formal and informal learning.

The notion of harmonisation, particular to the African continent, draws on the use of learning outcomes and specifically how learning outcomes are used in level descriptors that provide broad indications of levels (vertical progression) and domains (horizontal differentiation) of learning intended to guide the development of qualifications in a sector, country or region. The interplay between learning programmes, curricula, qualifications and credentials, and the associated approaches to QA, is expanded on as foundational to any form of harmonisation attempted in Africa. The point is also made that, in effect, harmonisation may be to the ACQF what transparency was for the European Qualifications Framework (EQF).

Key findings from the mapping study

A detailed analysis is provided of the qualifications framework and/or qualifications system development in the thirteen African countries and three RECs included in the technical field visits, but also more broadly, drawing on the findings from the online survey and desktop review. As anticipated, qualifications frameworks are at different stages of development and implementation across the continent. Discussion and exchanges during the period of the mapping study, including through peer learning webinars from July to September 2020, unveiled the NQF dynamics of different types. Some countries moved from early thinking stage to tangible action of analysis and consultation (for example, Angola and Cameroon). Other countries are now moving from parallel sectoral frameworks (TVET, higher education) to establishing integrated comprehensive NQFs (for example, Mozambique and Rwanda). Other countries have moved on to approve their draft NQFs, upon consultation with the stakeholders on the reforms implied by the NQF principles (Eswatini). Some examples from the different African geographical regions are listed below.

- The majority of qualifications frameworks in Africa are operational in countries of the southern African region, where the SADC RQF is well established. These southern African NQFs have been implemented for a longer period and, as a result, have more mature legal bases, operational instruments and governance structures maintaining and assuring integrity of the NQFs.
- Recent developments in East Africa, notably in Kenya (since 2014), are noteworthy, with the establishment of the legal base, governance and register of qualifications.
- In the north, Egypt, Morocco and Tunisia have had legally established NQFs for some time and continue working on implementation structures and registers of qualifications. Ethiopia designed the technical-conceptual bases of its NQF.
- In West Africa we found a more diverse panorama of qualifications frameworks: some countries, notably Senegal and Togo, have established qualifications systems, such as the Licence Master Doctorat (LMD) system in higher education. Senegal has established a five-level professional qualifications framework, but has no comprehensive NQF yet. Ghana implements an eight-level TVET framework and is engaging in the development of a comprehensive NQF. Cape Verde is an example in ECOWAS of a comprehensive NQF, with a decade of operational experience governed by a specialised entity, which was not well known before the ACQF mapping process. Other West African countries, such as Sierra Leone and Guinea-Bissau, are at early stages of their NQF development processes.
- In Central Africa, Cameroon has been implementing the LMD framework in higher education since 2007, as well as a system of qualifications levels and types for TVET. Most importantly, as the country's education strategy for 2020 gives priority to establishing a NQF, a stakeholders' group started reflection in 2017 and tangible steps have been planned from 2020 onwards.

The question of scope concerns levels but also types of qualifications, and the extent to which frameworks accommodate non-formal and informal learning paths to qualifications. In terms of scope, the analysed African qualifications frameworks can be clustered in several situations:

- Sector-specific frameworks that operate independently, that is, in TVET and in higher education, without an integrated unifying framework.
- Sector-specific qualifications frameworks that are operational but are linked and work together with the wider integrated NQF.
- Only type of framework is national, comprehensive and inclusive, without sub-sector frameworks.

The level structure of the analysed NQFs is diverse. Regional integration plays an important role in defining the NQF structure in certain parts of the continent. In southern Africa, the ten-level structure predominates. In the North two of the NQFs are eight-level, one is seven-level. In West Africa, the eight-level structure is established in some of the NQFs. Although the sectoral scope of the framework conditions the level structure, there are several cases of sectoral frameworks spanning all levels of qualification: this is the case of the TVET framework in Ghana (8 levels, up to Doctor of Technology), the Occupational Qualifications Sub-Framework in South Africa (8 levels) and the proposed architecture of the revised professional qualifications sub-framework in Mozambique (9 levels).

The range of level descriptors captured by the survey shows some diversity, but in the comprehensive NQFs, and in some sectors (TVET and higher education), there is clear predominance of the domains: knowledge, skills, competence, and autonomy and responsibility. Two countries opted for a combination of more than three domains of learning, and added such domains as complexity, adaptability and communication. Some countries emphasise the importance of ‘values’ as a learning domain (Zimbabwe NQF).

NQFs in the analysed cases are associated with a range of objectives, which can be clustered as related with:

- Coherence and permeability between sub-systems’ learning outcomes and qualifications.
- Quality, transparency, enhanced visibility and trust of end-users: by introducing learning outcomes approaches, stakeholders’ participation in qualifications development and approval, and accessible users’ information through digital and online instruments.
- Parity of esteem and value of learning in different contexts and sub-systems: academic, vocational, formal, non-formal.
- Inclusion: qualifications can be obtained via validation of non-formal learning, recognition of experience from work and life.
- Regional and global comparability and recognition of diplomas and certificates.
- Wider societal and economic goals, in particular: increase the stock of qualified labour force; enhance employability of holders of qualifications; strengthen competitiveness and productivity of the economic sectors; align the qualifications system with demand and changing skills needs.

In terms of the governance of NQFs, it was found that more advanced NQFs in Africa tend to be overseen by qualifications agencies (authorities, coordination units) but also to a large extent by QA agencies and specialised commissions. Overall, there is a trend towards national settings, rather than sectoral agencies. In cases where sectoral agencies are well established – in TVET, higher education and general education – the national ministries provide more of a coordinating and oversight function. Ministries always play a key role in NQF governance and often act as incubators for the national and/or sector agencies that follow later. The risk of a multiplicity of departments and agencies with overlapping mandates is very real, more so in countries with sparse resources. Some countries are trimming their institutional set-up of education and training, seeking to optimise resources, roles and outputs. The role and involvement of representatives of socio-economic partners and social partners is treated differently in the analysed cases. In a number of cases (Cape Verde, Mozambique, Morocco, Kenya and South Africa) representatives of the world of work have a recognised role in the qualifications development and approval process, and in the governance of NQFs. The practice of sector qualifications councils is well rooted in countries such as Cape Verde and Mozambique, especially in the sector of vocational qualifications.

QA systems were found to be strongly associated with the sub-systems linked with the analysed NQFs. In most cases, the higher education sector tends to have better structured QA mechanisms than TVET and general education, having adhered to policies and practices of internal and external evaluation and accreditation, led by QA agencies (and departments) with varied degrees of autonomy and capacity. National and regional levels interact through the

activities of regional higher education councils, playing an important role in disseminating good practice and QA guidelines, and providing methodological support to member states. Examples include:

- ▶ The umbrella organisation, the Pan-African Quality Assurance and Accreditation Framework (PAQAF); the African Standards and Guidelines for Quality Assurance (ASG-QA) developed by the Harmonisation of African Higher Education Quality Assurance and Accreditation (HAQAA) initiative and approved in 2019. The ASG-QA offers guidelines recommending that learning outcomes be defined and documented for all programmes and benchmarked against level descriptors of national or regional qualifications frameworks. Interestingly, the ASG-QA contains guidelines addressing open and distance learning. In 2019, eight African national quality agencies participated in pilot external evaluations testing the ASG-QA.
- ▶ QA of higher education qualifications has a wider foundation, consisting of conceptual and policy aspects, standards tools and methods, experts' networks and national as well as regional agencies. The system LMD is associated with the QA framework overseen by the Conseil Africain et Malgache pour l'Enseignement Supérieur (CAMES).
- ▶ In a number of countries, the QA framework in TVET is closely associated with the principles and methods of the competence-based approach (Approche par Compétences – APC). The cycle of the APC involves upstream prospective skills analysis, mostly with a sector delimitation, leading to the design of standards of competence and of assessment.
- ▶ Graduate tracer studies are known to usefully contribute to evidence-based monitoring of the quality and relevance of learning and qualifications, but the mapping found only rare cases where such studies were undertaken regularly and findings used to improve quality (Morocco is one of such cases).

Credit systems are also widely used, although there are some differences across countries and across sectors. In a number of countries, the levels of the NQF are associated with the defined credit value of the qualifications. In other countries, the comparison of qualifications in the context of the NQF combines both the level complexity (based on the level descriptors) and the volume of learning (based on the credit system). The LMD system in higher education, adopted by a large number of countries in West and Central Africa, is associated with a standardised model of 25–30 credits (student workload) per semester. In one of the analysed countries, the higher education system follows the model 1 credit = 25–30 hours of student workload, while the TVET system uses the model 1 credit = 10 hours of student workload. In a number of countries, the model 1 credit = 10 hours is established. The concept of notional hours is used in many countries, although different interpretations exist.

International practice shows that the establishment of qualifications databases or registers contributes to making NQFs operational, improving transparency, outreach and public use. Repertoires and registers of qualifications cannot be disconnected from taxonomies and classifications. In the examples below, the linkage to various related classifications differs. Not all countries link qualifications with International Standard Classification of Education (ISCED) fields of education 2013 (UNESCO, 2013) or to the national occupational classifications. This issue can be addressed in a harmonised manner at regional and continental level and the ACQF could play a role. The ACQF mapping study found different situations and dynamics with respect to qualifications databases and registers, which can be grouped as follows:

- ▶ Databases of quality assured qualifications linked with the NQF, accessible and searchable online, notably via the website of the NQF institution. Examples of this include the well-developed South African Qualifications Authority (SAQA) National Learners' Records Database, which includes all qualifications of all sub-frameworks and levels, and part-qualifications. The Kenyan qualifications authority is developing the National Qualifications Management Information System (NAQMIS), which will bring together the qualifications-awarding institutions, the qualifications that they award and the learners. NAQMIS should be fully operational by October 2020. The online National Catalogues of Qualifications of Mozambique and Cape Verde can be included in this group, although they only include pre-tertiary vocational-technical qualifications linked with the NQF. In some of these registers, qualifications are associated with codes of occupational classifications.
- ▶ Listings and repertories of courses and qualifications under oversight of the different sub-systems (such as QA agencies) and institutions (providers, sectoral organisations), accessible online in yearbooks, tables and legal Acts of authorisation. In some countries developments are underway to put in place qualifications databases with the characteristics of those of the first grouping mentioned above. The mapping study found a range of different examples with these characteristics, such as in Angola, Morocco and Senegal.
- ▶ Information on authorised, accredited courses and qualifications available upon request or without internet support (in printed publications), as is the case in Cameroon. Some types of qualifications databases provide structured and detailed information on the qualification profile and exit outcomes, associated units of competence, assessment criteria and credits. Others are much briefer listings of titles of qualifications by sectors.

Resource and capacity constraints determine the quality and completeness of these registers and catalogues, and the frequency of their updates. To ensure transparency and integrity of qualifications databases, some countries issue specific legislation and methodological guidance (as in Cape Verde). In Angola, we identified an interesting example of a mobile app (Qualificar), promoted by the National Programme of Human Resources Training, which includes information on all courses of the whole education and training system, searchable by different variables (sector, level of qualification, geographic location, institution). This app aims to support career and study choices of young people, and to enhance transparency in the qualifications system.

Monitoring and evaluation of NQFs and measurement of their contribution towards wider objectives are actions not often considered and organised early on. An increasing number of countries in Europe and other continents are undertaking reviews and evaluations of their NQFs. The South African NQF went through several evaluations underpinning structural transformations and a new legal basis. Discussions during the mapping study with NQF instances showed that the problem of monitoring and evaluation of NQFs is not underestimated and many countries welcome support to develop adequate tools and systems. In some countries, the NQF legislation stipulates the obligation to monitor progress and measure impact, such as in Cape Verde. In other countries, such as in Cameroon, the education law mandates the state to assure regular evaluation of the education and training system by specialised organs. Morocco's Higher Council for Education, Training and Scientific Research (CSEFRS) is entrusted with the mandate and equipped with the resources to conduct regular evaluation of all sub-systems of education and training and other specific thematic analyses.

Governments and socio-economic partners agree on the need to improve and better use information on demand and supply dynamics, including employability. Mega trends, such as

digitalisation and ecological transformation, continue to impact on the reorientation of qualifications systems – the Covid-19 pandemic being a case in point. Today, this necessitates engaging in innovation to improve labour market intelligence, reinforce labour market observatories, explore the potential of existing and new data sources (internet and administrative, under strict data protection rules), interconnect databases and information systems, and use new visualisation tools and novel data analytics. The mapping study identified a number of labour market observatories working with different technical and analytical capacity in countries such as Angola, Morocco, Mozambique and Tunisia. Innovative projects exploring big data analytics based on online job vacancies websites are also under development, such as in Tunisia.

An initial comparative analysis of a selection of level descriptors of national and regional qualifications frameworks showed:

- Most NQFs focus strongly on factual knowledge in their first levels, but some introduce conceptual knowledge earlier, such as in Senegal.
- On the other extreme, the introduction of descriptors at the metacognitive level in the highest NQF levels is not consistent. For example, Kenya focuses exclusively on this area, while Cape Verde and Mozambique still contain a distribution of knowledge dimensions in their highest NQF levels.
- Across the levels, the analysis demonstrated a gradual shift towards higher knowledge levels across NQF levels.

Among the RQFs, SADC was found to be the most advanced in terms of its legal, technical and institutional basis, with the SADC RQF having been approved since 2011, and reactivated in 2017. In ECOWAS in October 2012, the ministers of education approved in October 2013 the guidelines and roadmap for implementation of NQFs and RQFs in the region. In the EAC, the East African Qualifications Framework for Higher Education (EAQFHE) was adopted by the ministers in April 2015, working in complementarity with the regional quality assurance systems. The EAQFHE has eight levels, from lower primary education to a doctorate degree. The SADC Technical Committee on Certification and Accreditation (TCCA) stood out as a longstanding oversight body that has promoted the SADC RQF. In the EAC, the overall coordination for the higher education section of the EAQFHE rests with the Inter-University Council for East Africa (IUCEA), which is the custodian and governing body delegated by the EAC. NQFs of two SADC member states have been aligned to the SADC RQF (South Africa and Seychelles) and alignment is underway in Mauritius.

The analysis of a selection of qualifications from Kenya, South Africa, Botswana and Namibia was also undertaken. Qualifications for a hotel assistant were explicitly not found and were replaced with qualifications that are common in the hospitality training sector and reflect broad training in hospitality services at certificate level. In the case of qualifications for accountant, it was found that first degree courses in accounting were not common. Teaching coding courses were also included in the analysis. It was found that the hospitality qualifications' learning outcomes did not necessarily have the same focus as the profiles of the European Skills, Competences, Qualifications and Occupations (ESCO) taxonomy, while the breadth and depth of accounting qualifications are also different from ESCO qualifications at the same levels.

Overall, it was found that African countries have extensive NQF-related activities underway. SADC seems to be the most advanced, but several countries in the other regions of the continent have made huge strides in developing their NQFs, with the EAC, ECOWAS and, to some extent, also the Intergovernmental Authority on Development (IGAD) well on their way to developing RQFs.

More broadly, the range of African policies and strategies – including Agenda 2063 (AUC, 2015b) and its First Ten-Year Implementation Plan (2013–2023), the Continental Education Strategy for Africa (AUC, 2019c), the Agreement Establishing the African Continental Free Trade Area (AUC, 2019b), the Continental Strategy for Technical and Vocational Education and Training (TVET) to Foster Youth Employment (AUC, 2018a), the Protocol to the Treaty Establishing the African Economic Community relating to Free Movement of Persons (AUC, 2018b), and the Revised Convention on the Recognition of Studies, Certificates, Diplomas, Degrees and other Academic Qualifications in Higher Education in African States (UNESCO, 2014c) – provide an incredibly rich framework in which improved harmonisation of qualifications can take place.

The mutual learning with countries and RECs and the increased transparency stimulated by the ACQF development process from September 2019 to September 2020, through the peer learning programme and the mapping study, is already contributing to reaching the goals of CESA 16–25, as formulated in strategic objectives 4c and 4d, which explicitly refer to the establishment of qualifications frameworks, notably a continental qualifications framework linked with national and regional qualifications frameworks:

- Ensure acquisition of requisite knowledge and skills as well as improved completion rates at all levels and groups through harmonization processes across all levels for national and regional integration.
- Set up national qualification frameworks (NQFs) and regional qualification frameworks (RQFs) to facilitate the creation of multiple pathways to acquisition of skills and competencies as well as mobility across the sub-sector
- Develop continental qualifications framework linked to regional qualifications and national qualification frameworks to facilitate regional integration and mobility of graduates.

International considerations

The mapping study found that referencing, or alignment, the preferred term in SADC (SADC Secretariat, 2017b), has given countries the opportunity to reflect on their conceptual-technical designs in response to underpinning issues and objectives, on the QA systems across the sectors and the linkages with each other and to the NQF, and contributed to strengthening national stakeholders' dialogue. This in turn has often strengthened sector relationships, qualifications pathways, and the effectiveness and efficiencies of the QA systems. Adapting the various definitions, referencing is understood as a process that results in the establishment of a relationship between the levels of the RQF and NQF or system – importantly, referencing is viewed as more than a technical exercise, hinging on building trust through increased transparency. Through this process, national authorities responsible for qualifications systems, in cooperation with stakeholders responsible for developing and using qualifications, define the correspondence between the national qualifications system and the levels of the RQF (ASEAN, 2018; CEDEFOP, 2011b; SADC Secretariat, 2017b; SAQA, 2020). Table 1 provides a high-level summary of the referencing activities underway internationally.

Overall, the mapping study shows clearly that qualifications framework development, including both NQFs and RQFs, is an important global phenomenon and that the African continent stands to benefit not only from being part of this process, but also in inspiring and perhaps showcasing new developments in this area.

Table 1: Overview of RQF-NQF referencing processes

Regional qualifications framework	Number of participating countries	Number of countries that have referenced to the RQF
Arab Qualifications Framework (AQF)	10	*
Association of Southeast Asian Nations Qualifications Reference Framework (ASEAN QRF)	10	4
Caribbean Community Technical and Vocational Education and Training Regional Qualifications Framework (CARICOM TVET RQF)	15	0
Economic Community of West African States Regional Qualifications Framework (ECOWAS RQF)	15	0
East African Qualifications Framework for Higher Education (EAQFHE)	5	0
European Qualifications Framework (EQF)	39	36
Pacific Register of Qualifications and Standards (PRQS)	15	6
Southern African Development Community Qualifications Framework (SADCQF)	16	2 completed, 1 underway
Transnational Qualifications Framework of the Virtual University of the Small States in the Commonwealth (TQF VUSSC)	32	0

*Information not available

When considering the diverse landscape of qualifications frameworks and education and training systems on the continent, it was found that the NQF is seen as one component of the wider national qualifications system, not a separate or isolated instrument across all the language traditions. The NQF works together with the other essential instruments and components – the national catalogue of qualifications, the QA system, and the system of validation of non-formal and informal learning. This systemic attachment of the NQF is defined in policy documents and in the legal basis and put in practice by the governing set-up. The French shift to level descriptors, where the language is more inclusive of both non-formal and informal learning, and more reflective of the EQF structure, may prompt other countries with similar framework descriptors to shift to the French approach to framework structures.

Key considerations for qualifications harmonisation in Africa

#1 Fit for purpose qualifications systems in Africa

The continental trend towards development and consolidation of national qualifications frameworks is a significant finding of the mapping study, and closely resembles trends in Europe, and similar trends underway in parts of Asia and the Pacific.

Most African countries define reform-oriented NQFs, with far-reaching goals contributing to turning around education, training systems and qualifications towards parity of esteem between academic and professional learning pathways, inclusion for citizens of all demographics and schooling histories, transparency of the value of qualifications, and openness to all types and forms of learning. In this context, NQFs are seen as one component of the wider national qualifications system, working together with the other essential components – the national catalogue of qualifications, the QA system, and the system of validation of non-formal and informal learning.

It is important to take into account that there are a handful of African countries that have elements of qualifications structures and/or systems that may not be identified as qualifications frameworks. When considering the diverse landscape of qualifications frameworks and education and training systems on the continent, qualifications frameworks can be considered as implicit in certain countries (for example, in a large number of French-speaking countries). Moving to explicit NQFs should be an incremental process, based on policy learning (not policy borrowing), contributing to clarifying the qualifications landscape while improving links, articulation and transparency. Further development of NQFs in this group of countries should a) fit with their reforms of education and training systems; b) contribute to reinforcing strong components and addressing critical bottlenecks in terms of transparency of qualifications and permeability of pathways and modalities of learning; and c) learn from the experiences of other African countries engaged in similar processes. In such cases, a modernisation process could be of great value, allowing the systems to become more learning outcomes-based and more familiar with some of the international terminology being used. Such a transition should be managed with participation of all relevant stakeholders and levels of governance (national, regional, sectoral) and be sustainable.

#2 Legal and policy foundations for NQFs: Documented reflection and analysis from consultation phase

The mapping study has shown a strong preference for a legal basis for NQFs in Africa, in line with the international trend. The legal basis is seen as essential to provide legitimacy to a new reforming pillar of an established system with long traditions and often weak capacities in education and training. A few trends in this regard are important to note:

- Considering the relatively high number of NQFs that are being developed, more discussion documents would have been expected as they form an important foundation for the subsequent legal processes.
- It would be good to encourage countries that are moving towards the formalisation of NQFs through legislation and policy to make a more concerted effort towards the public and electronic dissemination of founding documents and research. The ACQF inventory will hopefully assist in this regard, as well as the establishment of an online platform/ website for the ACQF project.

It was evident from the country reports that in many cases, the early stages of NQF development often progress reasonably well, but legal establishment is one of the biggest hurdles. Early-

generation NQFs seem to have moved very quickly between these stages, including the early adoption of policy and legislation, while in later stages, many countries do not get beyond this stage. A key determinant in this stage is the political will and leadership to move the NQF from concept to policy that specifies mandate, governance and resources.

#3 Governance of NQFs: Form and function

The challenge in many member states is that the limited technical capacity at national and regional levels often means that function and strategy is weakly defined, and is soon overtaken by form and structure. This leads to weak policy implementation and mission drift. The risk of a multiplicity of agencies with overlapping mandates is very real, more so in countries with sparse resources, and the international trend, outside of Africa, is certainly towards increased integration of agencies. The impact of Covid-19 on state resources across the world will undoubtedly accelerate such policy decisions.

#4 NQF architecture: Strong convergence to learning outcomes, parity of esteem and articulation

The mapping study clearly illustrates a strong convergence of NQFs to eight to ten levels, with level descriptors and three to five domains, mostly those of knowledge, skills, competence, autonomy and responsibility, values, and attitudes. The universal move towards the use of learning outcomes and the extent to which quality assurance of learning has changed is well captured across member states. For some African countries, the NQF is seen as vital in linking the different components of the education system, such as TVET and general education, thus enabling smoother progression routes. This would, in theory, result in improved horizontal as well as learner and career mobility. This intention to provide multiple pathways, so that learners are encouraged to upgrade their skills, knowledge and competencies to respond to the changing needs of education and the labour market, is a strong trend across all submissions. The majority of countries with qualifications frameworks are developing unified/integrated, or national frameworks, even if sectoral frameworks are in place. TVET and higher education are the two sectors where sub-frameworks are found, while none are presently known in general education. This may be due in part to the relatively few qualifications found in general education, as well as the reasonably well-established school inspection systems. Regional examinations, such as in West Africa, are also especially important and provide a very strong foundation for NQF and RQF developments, potentially also the ACQF itself.

#5 Data and evaluation of NQFs: A major risk, but perhaps also an opportunity

Few countries on the continent, or indeed globally, have attempted to formally review their NQFs and RQFs, and even fewer have been able to employ more sophisticated evaluation designs that are able to accurately measure impact (Jitsing et al., 2018). The vision and scope of the ACQF will have to be conceptualised to provide a continental vision, but also be realistic in what it can achieve, which should be measurable. In the mapping study, we have set a trajectory for such an approach for the ACQF, aligned to the relevant CESA 16–25 priority objective 4 (c and d) and indicators (AUC, 2016), but only time will tell if the process will remain aligned to this initial intent. International experience has been that this is seldom the case. The global trend towards increased automation, on the other hand, provides an opportunity for innovation to be introduced through the ACQF process that will benefit all involved. The development of continental schema for data, monitoring and analysis, such as taking place within CESA, can benefit from the new trends towards more open platforms and greater levels of interoperability.

#6 The ACQF can act as a catalyst for CESA

The mapping study has shown in a very concrete manner that the ACQF, as convenor of NQFs and RQFs across the continent, can act as a catalyst within the more harmonised landscape. Supporting implementation and renewal of qualifications frameworks at national and regional levels is aligned to the CESA 16–25 priority objective 4 (c and d) and CESA 16–25 indicator 4.2 (existence of a national qualifications framework) in particular, but also 9.4 (inbound mobility ratio) and 9.5 (outbound mobility ratio), as is shown in Chapter 1 of this mapping report. The current work underway by the AUC on the CESA indicators and the platform through which data can be collected, stands to benefit greatly from this possible collaboration.

#7 Financing NQFs: Less is more

As expected, the cost and financing of NQFs was a strongly identified theme in the analysis of the online survey, with a noted influx of development aid in support of qualifications framework development at multiple levels. New innovative private-public funding models (De Witt et al., 2020; Mawoyo et al., 2020) provide an important avenue to explore during the next phase of the ACQF process, but can also provide options to countries at present. Covid-19 could act as a catalyst for such new opportunities. Linked to the funding constraints experienced is the strong trend towards prioritising the organisational structures required to oversee and operationalise NQFs.

#8 Dissemination and communication for NQFs: Let's start with the end-user

The online survey responses showed that dissemination and communication to end-users is another key weakness across countries and RECs. This is also a common trend internationally, but this does not mean that it cannot be overcome. On the other hand, evidence from peer learning activities led by the ACQF development project in 2019 shows that new NQF development initiatives are involving more participants via awareness-raising activities (for example, in Angola), while well-established NQFs are using the power of social media (for example, the Kenyan National Qualifications Authority) to reach out to diverse user groups. Capacity development of the education and training sector stakeholders ought to be a priority in plans to make the NQF understood and used by learners, teachers, curriculum developers. The increased trend towards online platforms, and the use of digital tools, further accelerated by Covid-19, pose a great opportunity to think differently and involve end-users in ways not previously possible (NUFFIC, 2020). African NQFs, RQFs and the ACQF are well positioned to do things differently to the way they were done in the past. This will, however, require a strong vision, courageous leadership and combined forces to do what has not been done before.

#9 Alignment and referencing: Perspectives from NQFs

Although there is strong international evidence of NQFs being aligned to RQFs, very few African NQFs have been involved. What is obvious, however, is that the well-established EQF has become a de facto reference point for many established NQFs and RQFs. The revised EQF 'Recommendation' (European Union, 2017) recommends exploring possibilities for the development and application of criteria and procedures to enable, in accordance with international agreements, the comparison of other countries' (non-EQF) national as well as regional qualifications frameworks with the EQF¹.

1 It is understood that the term 'third country' is not undisputed in this context. While the EQF 'Recommendation' uses this term, this research will try to avoid it, whenever possible.

#10 Build on existing continental and regional initiatives

The SADC RQF and EAQFHE are making good progress. Several other Africa-wide initiatives have been listed in this mapping report. Some of these initiatives are at the strategic level (such as CESA and Agenda 2063), while others are very focused on specific sectors (such as the African Higher Education and Research Space [AHERS] and PAQAF), and CAMES also stands out as an important and longstanding regional initiative, combining quality assurance with the qualifications framework in higher education. Other continental frameworks being developed, such as for teacher qualifications (Nwokeocha, 2019), and even the Continental Teacher Mobility Protocol (CTMP) (UNESCO IICBA, 2019), to mention two more examples, also need to be considered.

#11 The relationships between NQFs, RQFs and the potential ACQF

The mapping study has highlighted the fact that the interplay between emerging RQFs, the various NQFs across Africa, and the proposed ACQF will be a critical factor for future work in this area. While NQFs are quite distinct in their orientation and purpose, the potential cooperation and complementarity between the RQFs and the ACQF needs a foundation based on a shared vision, acknowledgement of specific key regional interests and goals, and consideration of economies of scale. Dialogue, consultation and trust building will be essential in shaping the priority functions and operational modes of the ACQF towards NQFs and RQFs in Africa. Of importance is a future-oriented vision, in which new learning, new types of certificates and of awarding tools are part of the menu for every qualifications reform and framework.

CESA 16–25 priority objective 4 (c and d) provides the political vision and foundation for the wide scope of the ACQF in its interrelations with regional and national qualifications frameworks on the continent. The findings of this mapping study and ongoing peer exchanges with RECs and national level (NQF) authorities supply evidence supporting the ACQF's development options for effective, sustainable and pertinent cooperation with the existing RQFs on the continent (such as the SADC qualifications framework, EAC RQF, and others in development), and with RQFs involving African NQFs (such as the Arab Qualifications Framework [AQF]). The concrete objectives, modalities, legal format of the interrelations between continental, regional and national levels will be the subject of political deliberations and technical and organisational analysis. The advantages and disadvantages of each scenario must be carefully unpacked and, critically, this process and the reaching of some form of consensus should be done through social dialogue. Building trust during this process will be essential to ensure that the implementation of the model can be done in a sustainable, constructive and coordinated manner.

#12 Legal and policy foundations for RQFs: Getting the balance right

RQFs across the world are closely tied to regional conventions and protocols. These international normative instruments are mostly based on voluntary participation and have extremely limited enforceability. Depending on the model of ACQF that is preferred in Africa, the supporting policies may need to be adjusted and/or developed. In the broader African context, Agenda 2063 (AUC, 2015b), and its First Ten-Year Implementation Plan (2013–2023), the Continental Education Strategy for Africa (AUC, 2019b), the the Agreement Establishing the African Continental Free Trade Area (AUC, 2019b), the Continental Strategy for Technical and Vocational Education and Training (TVET) to Foster Youth Employment (AUC, 2018a), and the Protocol to the Treaty Establishing the African Economic Community relating to Free Movement of Persons (AUC, 2018b) provide the foundation for what the ACQF may become. Of critical importance is the Revised Convention on the Recognition of Studies, Certificates, Diplomas,

Degrees and other Academic Qualifications in Higher Education in African states (UNESCO, 2014c). Many complementary initiatives underway, many in higher education, further expand this foundation. The question will really be about the form the ACQF takes. If more that of a traditional RQF, then these frameworks would probably be largely sufficient, but if the move is towards a novel fifth-generation framework, then there will undoubtedly have to be adjustments across many levels.

#13 Governance of RQFs: The link to RECs and the AUC

The mapping study has clearly shown the weaknesses at REC levels across Africa. The question is whether RECs have the capacity to develop and implement regional qualifications. Do RECs have the capacity to sustain the level of funding and effort to fully implement a qualifications framework across their regions? The current situation certainly only allows for slow progress. The SADC RQF is a case in point, having first been considered in 2011. The technical support required for qualifications framework development, across national, regional and continental levels, is an area that requires serious consideration for any of the models outlined above to be successful.

#14 A case for differentiated support to countries

The ACQF aims to contribute and enable qualifications frameworks' development on the continent. Supporting development of NQFs should be contextualised, while also learning from other experiences, and fit for purpose.

As noted in Chapter 3 of this report, African countries are clearly at different levels of NQF development. Several layers of differentiation of qualifications frameworks have been found by this mapping study. At a high level, five groupings of countries can be considered, each with unique needs. These differences should not be glossed over, and specific engagements with countries in each of these categories should take place across the groupings proposed in the Table 2.

Most importantly, the allocation of countries to stages of development can be quite fluid given the current dynamics, and should therefore be reviewed and updated, as more countries are moving between stages. In 2019–2020, several countries took steps to start developing their NQFs (Angola, Cameroon, Guinea-Bissau, Sierra Leone and Somalia). But this group of 'NQF at early thinking' is already changing, as Angola entered the stage of 'NQF in development and consultation', and by the end of 2020 is finalising the NQF conceptual and technical design, discussed among public institutions, professional organisations and social partners. In 2019–2020, two countries adopted their NQF legal text and regulatory basis (Lesotho and Eswatini) and moved to the stage of 'NQF in place, legal base approved, implementation initiated'. In the same period, at least one country (Cape Verde) reviewed the existing NQF legal acts and adopted a new package of legal and regulatory instruments strengthening the national qualifications system and the NQF. Other countries are preparing to engage with the review of their NQF (Seychelles). In a number of cases, policy efforts have been centred in the integration of existing sectoral qualifications frameworks into one NQF of comprehensive scope (Rwanda and Mozambique).

This mapping study captures traces of these movements. Other specific characteristics cannot be overlooked – for example, those related with certain regional commonalities. The ACQF project continues engaging with the countries, to collect updates on their ongoing and planned NQF initiatives, and to fill in the information gaps in a number of countries.

#15 Sustainability and the harmonisation of qualifications in Africa

Much was said about sustainability before the Covid-19 pandemic (ADEA, 2020; QQI, 2020), but this seems to have been overtaken by more immediate concerns. As a continent and a global community, we have to return to these imperatives and carefully consider what the harmonisation of qualifications in Africa would look like when viewed through the lens of sustainable development. Africa, with its strong youth dividend, is poised to grow economically in the future and even overtake other continents that have long been more developed. A harmonisation strategy for Africa, whatever form it takes, must be environmentally and economically sustainable. If the ACQF is to become a new-generation framework, then sustainability will be integral to its design, as much as its digital, green and social inclusion orientation.

Table 2: Differentiated support to countries to develop NQFs

Stage of NQF development	Type of support that could be the most valuable
NQF in place and implemented for some time, and reviewed	Networking, collaboration, peer review, referencing, explore new methodologies. Streamlined monitoring and evaluation. Alignment with other policies such as the labour market. These NQFs should share their experiences, challenges and perspectives with all other NQF initiatives in Africa.
NQF in place, legal base approved, implementation initiated.	Technical support, peer learning related with key implementation factors (dimensions), such as: organisational shaping and planning, operational instruments, register of qualifications, methodology package; governance and management of NQF for sustainability and impact; inventory of existing qualifications. Participation in regional, continental and international networks and groupings.
NQF in development and consultation	Technical support, peer learning related with major policy and technical issues and themes, unlocking key obstacles, guidance on regulatory-legal aspects.
NQF at early thinking	Technical assistance, peer learning, sharing of experiences supporting vision building and participation. Analysis of options, SWOT analysis, strategic planning, capacity development and stakeholders' buy-in.
NQF not in place, development not started	High-level technical support, sharing of experiences – local capacity building, self-assessment and baseline analysis.

The collection of reports of the ACQF mapping study

ACQF project documents and reports developed during the ACQF project development planning

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Concluding remarks

The ACQF is well positioned to be the first of a new generation of qualifications frameworks. There is an opportunity for the ACQF to set the global benchmark for a new-generation qualifications framework based on a convergence of recognition methodologies, a move towards digitalisation, a greater level of interoperability, and the realisation of independent reference points. The ACQF has the potential to infuse a learning ecosystem approach that has only been envisioned to date (UIL, 2020), building it from the outset from a learner and human rights perspective that envisions data access as a future common good.



1

INTRODUCTION AND CONTEXT TO THE MAPPING STUDY

Key points

- › This mapping report presents the key findings of the mapping study of qualifications frameworks development in Africa. The study was conducted from October 2019 to September 2020, covering qualifications frameworks (national and regional) at different stages of development, consolidation and implementation as a precursor to the envisioned African Continental Qualifications Framework (ACQF).
- › The ACQF, as a policy instrument, is at an early stage of conceptualisation. The process is supported by a project running until October 2022. The ACQF aims to contribute to:
 - enhanced comparability, quality and transparency of qualifications of all levels and from all sub-systems;
 - facilitating recognition of diplomas and certificates, and mobility of learners and workers;
 - complementarity with national and regional qualifications frameworks, and support of the creation of a common African educational and qualifications space, in synergy with other relevant instruments such as the Pan-African Quality Assurance and Accreditation Framework (PAQAF);
 - promoting cooperation and alignment between different qualifications frameworks (national, regional) in Africa and eventually with other frameworks globally.
- › The ACQF is underpinned by Agenda 2063 (AUC, 2015b) and the Continental Education Strategy for Africa 2016–2025 (CESA 16–25) (AUC, 2019c).
- › The mapping study was designed according to eleven thematic areas, the use of a Theory of Action and an early Theory of Change, and included desktop research, an online survey, and technical visits to ten countries and three Regional Economic Communities (RECs), remote meetings and exchanges for information collection with one country and updates and contributions from debates at ACQF peer learning programme (July–October 2020).
- › The mapping report provides a set of online tools and templates for policymakers and researchers working in this discipline.

1.1 Introduction

The development and implementation of national, regional and even transnational qualifications frameworks has been underway around the world, including on the African continent, since the late 1980s. Broadly interpreted as instruments for the development and classification of qualifications according to a set of criteria for levels of learning achieved (OECD, 2006), qualifications frameworks have evolved through many iterations over the last four decades, and while not uncontested, steady progress has been made. As this report is being prepared, there are at least 160 countries across the world with National Qualifications Frameworks (NQFs) in place, at least four regions with Regional Qualifications Frameworks (RQFs), and one Transnational Qualifications Framework (TQF) (COL & SAQA, 2008; CEDEFOP et al., 2019a, 2019b).

Over the last four decades, there have been several evolutions in the design of NQFs and RQFs and, in some cases, reviews and attempted evaluations of their impact on the education and training systems in which they have been implemented. In more recent years, the impact of technology on the recognition of learning has been significant, with new thinking towards more agile credentialing increasingly becoming more relevant to the qualifications community internationally (Council on Higher Education and Accreditation, 2019). The ever-present imperative is to consider the demand side of employment and employability, in tandem with the historical bias towards the supply side inherent in qualifications design. Another increasingly important consideration is that of education for sustainable development and how qualifications and the recognition of learning can and should be done to promote the Sustainable Development Goals (SDGs) beyond only those focusing on education and skills. A further consideration is the increasing focus on continental and international trade agreements and their relationship to the harmonisation of qualifications. The African Continental Free Trade Area (AfCFTA) is key in this regard (Moremong, 2019). Holding this balance between technology, sustainability and free trade, in the context of learning, qualifications and mobility in and from Africa is not a simple task. This mapping report attempts to provide some initial considerations as a foundation for the work to follow.

This mapping study focuses specifically on qualifications framework developments on the African continent, but not in isolation from the broader strategic and policy initiatives taking place at continental level. Agenda 2063 of the African Union Commission (AUC) is Africa's blueprint for 50 years from 2013 until 2063 (AUC, 2015b). The aim of this strategic framework is to position Africa as a leader in the global arena, while achieving its aim of inclusive and sustainable development. This master plan further entrenches an ethos of continental and regional integration, democratic governance and peace and security. Job creation, youth employment and empowerment, education and skills revolution stand out among the major goals of the Agenda 2063. The CESA (AUC, 2019c) is key in this regard, as it sets out to 'reorient Africa's education and training systems to meet the knowledge, competencies, skills, innovation and creativity required to nurture African core values and promote sustainable development at the national, sub-regional and continental levels' (AUC, 2015a, p. 9). The CESA strategic objectives include, among others, an emphasis on 'harnessing the capacity of ICT [Information and Communications Technology] to improve access, quality and management of education and training systems' (Objective 3) and 'ensuring acquisition of requisite knowledge and skills as well as improved completion rates at all levels and groups through harmonization processes across all levels for national and regional integration' (Objective 4). This focus on harmonisation and integration, while harnessing the capacity of ICT, lies at the core of the mapping study, and by implication, the notion of an ACQF.

The mapping study was commissioned by the AU-EU Skills for Youth Employability/Skills Initiative for Africa, Technical Cooperation – Developing the African Continental Qualifications Framework (ACQF). JET Education Services (JET) conducted the study, with the coordination of the European Training Foundation (ETF), which also provided substantial inputs to design, review, analysis and drafting. The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) was responsible for the financial administration.

This report presents the key findings of the mapping study of qualifications framework development in African countries, conducted between October 2019 and September 2020, covering qualifications frameworks at different stages of development, consolidation and implementation. It is important to mention that while the fieldwork and baseline research for this study were largely completed by March 2020, the report itself was prepared during the peak of the Covid-19 pandemic internationally, which had not left the African continent untouched (ADEA, 2020). Of relevance to this study was the impact the pandemic was having on learning and the recognition of learning. Much will probably still be said about this for many years to come, but what stood out, even during this early stage, was the increasing shift towards online learning and more agile ways to quality assure and recognise learning. What was also overwhelmingly evident at the time was the unpreparedness of African countries, like many others across the globe, to adapt to the changing landscape. Most countries adopted a combination of measures, involving school closures and shifts to different modalities of remote learning. Governments and stakeholders are still making sense of the effectiveness and unanticipated outcomes of education reaction measures at national and local levels. Silver linings of this unprecedented situation include new experiences in student assessment, new digital learning resources and shared platforms, new ways to conduct programme and institution quality assurance. Through this crisis, new visibility was given to the scale and effect of inequality and the digital divide on access to education and qualifications.

In this mapping report, we focus specifically on the progress made in Africa, as we provide an overview of the current state of play relating to NQFs and RQFs on the continent, as a precursor to the envisioned ACQF. Africa has been a strong role player from the outset, notably through the presence of the first-generation NQF in South Africa, but soon thereafter also in NQFs in Mauritius, Namibia and Seychelles. Over the last few years, several other African countries have also moved to more advanced stages of NQF development. Out of 40 countries directly involved in this mapping study, it was found that 17 have approved NQFs and have started implementation; 10 are engaged in different stages of development and consultation of their NQF's conceptual design and policies; while 10 have started the first steps of reflection and analysis towards NQF. This can generally be considered as a positive perspective for African cooperation and progress towards the strategic objectives 4 (c and d) of the CESA.

RQFs have also been considered in at least three of the RECs in Africa, notably in the Southern African Development Community (SADC) from as early as the late 1990s (SADC, 2011; SADC TCCA, 2011), and more recently in the East African Community (EAC) (*ACQF mapping study: East African Community*, 2020), the Economic Community of West African States (ECOWAS) (UNESCO, 2013; *ACQF mapping study: ECOWAS*, 2020), and most recently, also the Intergovernmental Authority on Development (IGAD) regional bloc of countries (IGAD, 2019).

The merits of a continental recognition scheme, currently proposed in the form of the ACQF, is not the focus of this report. The ACQF, as a policy instrument, is at an early stage of conceptualisation, and aims to: 1) enhance comparability, quality and transparency of

qualifications from all sub-sectors of education and training and support people's lifelong learning outcomes; 2) facilitate recognition of diplomas and certificates, and mobility of learners and workers; 3) work in complementarity with national and regional qualifications frameworks, and support the creation of a common African educational and qualifications space, in synergy with other relevant instruments such as the PAQAF; and 4) promote cooperation and alignment between different qualifications frameworks (national, regional) in Africa and eventually with other frameworks globally (AUC, 2019b). This implies the possibility that the ACQF could act as a hub for mutual understanding and for peer and policy learning in Africa; support development and implementation of qualifications frameworks at national level, based on quality assurance, learning outcomes orientation and openness to innovation in technology and other mega trends; and value and take account of stakeholders' views and international experiences.

These aims of the ACQF take into account international experience, but more particularly the key aspects of the AUC's Agenda 2063 highlighted above. Their feasibility and applicability will be determined through work that will follow this mapping study and the conditions for sustainability once the ACQF receives political endorsement. Quick wins during the ACQF development process, such as peer learning between African stakeholders for sharing of NQF practice, could contribute to gradually generating a body of knowledge of African production for Africa (which would perhaps be valuable for other regions engaged in similar dynamics). Capacity development and dissemination of relevant information throughout the continent has great potential to generate a network of motivated and informed stakeholders and trained technical experts and advisors, motivated to work together for more transparent and inclusive skills and qualifications systems on the continent. It is also hoped that the mapping study will contribute to a nuanced conceptualisation of the ACQF design and its aims by providing a contemporary view on the state of play across the African continent.

Critical considerations during this process will be not only the merit of the ACQF itself, but also the interrelationships between sectoral, national, regional and this proposed continental qualifications framework. This will raise questions such as the issue of complementarity between RQFs and the ACQF. It will also be essential to learn from other regional processes, notably Europe and Asia, while carefully considering the African continent's peculiarities. Added to this complex mix is the need to potentially consider a new-generation RQF, one that draws on lessons from ongoing education and qualification frameworks' responses to the global crisis related to the Covid-19 pandemic, with nascent thinking on credentialing that is more agile and, critically, is much closer aligned to the world of work and other societal drivers of change. This is certainly not a task to be taken lightly and the plans for a three-to-four-year set-up phase is a good start. The involvement of key actors on the African continent is also critical, specifically the AUC, RECs, various continental bodies, and most importantly the national-level stakeholders, such as the authorities in charge of qualifications systems and frameworks, the qualifications agencies already in place and other organisations representing students, employers and civil society.

Following a competitive call for proposals issued by the GIZ at the end of May 2019, JET, an African non-profit organisation with 30 years of experience in research, implementation and monitoring and evaluation, was appointed on 22 August 2019 to undertake this first part of the ACQF development process, namely the mapping study of qualifications frameworks in Africa aligned to the African Union's Agenda 2063. This mapping study lasted for a year, from September 2019 to September 2020, and constitutes the first part of a series of interconnected steps towards the ACQF as a technically validated technical and policy document (ACQF, 2019; AUC, 2019b).

The ACQF project consists of:

- › Mapping study (2019–20);
- › Feasibility analysis, options and scenarios for the ACQF (2020–21);
- › ACQF policy and technical document and action plan (2021–22);
- › Capacity development, support to countries and networking.

The first step, the mapping study, draws on desktop research, an online survey and, importantly, also a series of country and REC visits that took place in late 2019 and early 2020. In the period of the mapping study, three key stakeholder consultation workshops in conventional format were planned (2019–20), of which only one (2–4 September 2019) could take place. Due to the constraints of the Covid-19 pandemic, from March 2020 onwards stakeholder consultation, discussion of the country reports and peer learning activities were organised via a series of webinars and remote/online meetings. The design and approach of the mapping study is elaborated below, followed by a section on the location of this study in the broader African education and training ecosystem.

1.2 African Union policy context

The ACQF is underpinned by Agenda 2063 (AUC, 2015b) and the related policies and strategies, in particular the AfCFTA, the Protocol to the Treaty Establishing the African Economic Community Relating to Free Movement of Persons, Right of Residence and Right of Establishment (AUC, 2018b) and the CESA (AUC, 2019c). Agenda 2063, as the continental long-term strategy, articulates seven aspirations, which together address the Vision: ‘Building an integrated, prosperous and peaceful Africa, driven by its own citizens and representing a dynamic force in the international arena’ (ACQF, 2020, p. 1). The aspirations span social and economic sustainable development, integration; good governance, democracy and the rule of law; peace and security; cultural identity, shared values and ethics; people-driven development; and Africa as a strong, united and resilient global player and partner. The first aspiration – ‘A prosperous Africa based on inclusive growth and sustainable development’ – includes, among other things, the education and skills goal of Agenda 2063:

Agenda 2063 is a shared framework for inclusive growth and sustainable development for Africa to be realized in the next fifty years. It is a continuation of the pan-African drive over centuries for unity, self-determination, freedom, progress and collective prosperity pursued under Pan-Africanism and African Renaissance. It builds on and seeks to accelerate the implementation of past and existing continental initiatives for growth and sustainable development. It was agreed upon by the African leaders in 2013 through the 50th Anniversary Solemn Declaration during the commemoration of the Fiftieth Anniversary of the Organization of African Unity (OAU) (AUC, 2019c, p. 2).

Agenda 2063 aims to harness continental endowments, build on and accelerate the implementation of continental frameworks and other similar initiatives, and offer policy space for individual, sectoral and collective actions to realise the continental vision. Importantly for the ACQF process, Agenda 2063 also aims to provide internal coherence and coordination to continental, regional and national frameworks and plans adopted by the African Union (AU), RECs and member states’ plans and strategies.

Mandated by the Summit in January 2015, the AUC developed the First Ten-Year Implementation Plan (2013–2023) of Agenda 2063 (AUC, 2015b), as a basis for the elaboration of national development plans of AU member states, the RECs and the AU organs. The plan addresses essential drivers of prosperity and development: standards of living; good education and skills; health and nutrition; transformed economies and job creation; modern agriculture for increased productivity and production; blue/ocean economy for accelerated economic growth; and environmentally sustainable and climate resilient economies and communities. The plan defines goals by aspirations. Goal 2 of the first aspiration is focused on education and skills, and includes the following targets for 2023 linked with the ACQF initiative: 1) the African Education Accreditation Agency is fully operational, and 2) a common continental education qualification system is in place. The Ten-Year Plan indicates key process actions and milestones towards this target concerning the three levels: national, REC and continental. The planned timelines for achievement have been exceeded.

The AU is making massive efforts to advance the strategic objectives defined by the CESA (AUC, 2019c) and the Continental Strategy for Technical and Vocational Education and Training (TVET) to Foster Youth Employment (AUC, 2018a). The CESA pursues twelve strategic objectives, which address a wide range of dimensions and drivers of change, spanning the teaching profession, infrastructure development, ICT potential, improved skills acquisition and completion rates, eradication of illiteracy, gender parity, expansion of TVET at secondary and higher levels and better linkages with the world of work, expansion of higher education and research, education management systems and data analysis, education for peace and the creation of partnerships to support the CESA.

The CESA's strategic objectives 4 c) and d) explicitly refer to the establishment of qualifications frameworks, notably a continental qualifications framework linked with national and regional qualifications frameworks:

Strategic Objective 4: Ensure acquisition of requisite knowledge and skills as well as improved completion rates at all levels and groups through harmonization processes across all levels for national and regional integration.

1. Establish and institutionalize assessment of classroom learning outcomes at various stages
2. Build the capacity of teachers' informative assessment and its utilization for the improvement and remedial of learning outcomes
3. **Set up national qualification frameworks (NQFs) and regional qualification frameworks (RQFs) to facilitate the creation of multiple pathways to acquisition of skills and competencies as well as mobility across the sub-sector**
4. **Develop continental qualifications framework linked to regional qualifications and national qualification frameworks to facilitate regional integration and mobility of graduates**
5. Establish and strengthen quality assurance mechanisms and monitoring and evaluation systems (AUC, 2015a, p. 34).

Two of the guiding principles of the CESA – harmonisation of education and training systems and quality and relevant education, training and research – inspired the PAQAF, a wide-ranging policy initiative with ties to ACQF (AUC, 2019c).

Indicator 4.2 of the CESA Indicators Manual (AUC, 2016, p. 25) is closely related to the ACQF:

4.2: Existence of a National Qualifications Framework Definition: a structure which allows TVET and academic certifications to be significantly broadened, harmonised in line with industry requirements, unified and streamlined. This indicator shows whether a country can catalogue the skills that are being produced and whether these skills can easily be compared across institutions and countries. A National Qualifications Framework, which is aligned to a Regional Qualifications Framework presents opportunities for regional integration.

Having entered its operational phase in July 2019, the AfCFTA is a key flagship of African integration, to which the ACQF will contribute. Article 10 (Mutual Recognition) of the Agreement Establishing the African Continental Free Trade Area mentions recognition of education and harmonisation:

For the purpose of the fulfilment, in whole or in part, of its standards or criteria for the authorization, licensing or certification of services suppliers, and subject to the requirements of paragraph 3 of this article, a State Party may recognize the education or experience obtained, requirements met, or licenses or certifications granted in another State Party. Such recognition, which may be achieved through harmonization or otherwise, may be based upon an agreement with the State Party concerned or may be accorded autonomously (AUC, 2019b, pp. 40–41).

According to article 3, the general objectives of the AfCFTA include creating a single market for goods and services, facilitated by the movement of people, resolving the challenges of multiple and overlapping memberships, and expediting regional and continental integration processes. AfCFTA translates to a market potential for goods and services of 1.2 billion people and an aggregate gross domestic product of about US\$2.5 trillion for the continent (Moremong, 2019). As a result, the World Trade Organisation considers AfCFTA the largest trade agreement in the world, in terms of participating countries, in its existence (Crabtree, 2018). The United Nations Conference on Trade and Development (UNCTAD) envisages that AfCFTA ‘which already takes into account a loss of \$4.1 billion in tariff revenue, will arise from increased employment, better use of domestic resources to increase production in manufacturing and agriculture, and access to a variety of cheaper products’ (UNCTAD, 2018, p. 3).

Most importantly for the purposes of the ACQF project, the Protocol to the Treaty Establishing the African Economic Community Relating to Free Movement of Persons, Right of Residence and Right of Establishment, adopted by the 30th Ordinary Session of the AU Assembly, in its article 18 on the mutual recognition of qualifications, specifies the establishment of a continental qualifications framework to encourage and promote the free movement of persons (AUC, 2018b). The AU Free Movement Protocol has four ratifications at present. Since a minimum of ten ratifications is needed, it is not yet in force. Concerning article 18, it is helpful to consider the following documents: the African Youth Charter, the Continental Strategy for Technical and Vocational Education and Training (TVET) to Foster Youth Employment, the African Standards and Guidelines for Quality Assurance in Higher Education (ASG-QA), the statutes of the Pan African University (PAU), and the Revised Convention on the Recognition of Studies, Certificates, Diplomas, Degrees and Other Academic Qualifications on Higher Education in African States (Addis Convention).

Although the African Youth Charter predates Agenda 2063, it is worth mentioning that in its article on education and skills development, it calls on 'State Parties' to take appropriate measures with a view to achieving the full realisation of the right to education and skills, including equivalence of degrees between African educational institutions. The African Youth Charter has been ratified by 39 states and originated in 2009 (AUC, 2009). Article 13(4)(o) focuses on education and skills development: 'Promote the equivalence of degrees between African educational institutions to enable the youth to study and work in State Parties' (AUC, 2009, p. 10).

The mission of the Continental Strategy for Technical and Vocational Education and Training (TVET) to Foster Youth Employment (AUC, 2018a) is twofold. The first is to build a unified general framework that can serve as a continental platform around which AU member states will cluster or be invited to build coherent and integrated TVET systems at national, regional and continental levels through the development and implementation of national and regional plans. The following are some of the strategic objectives the strategy seeks to achieve: establish common quality standards; genuine standardisation in TVET; mutual recognition and harmonisation of training among countries and across formal and informal systems; and mobility of players, especially teachers (AUC, 2018a). Secondly the strategy seeks to position TVET within the education system as a tool for the empowerment of African people, especially youth, as a culmination of all the training needed for the social economic development of the continent.

Endorsed by the AU in 2019, the ASG-QA seeks to support higher education institutions and quality assurance agencies in member states in Africa to:

- have a common framework and understanding of quality assurance systems for teaching and learning among all stakeholders at continental, regional and national level
- develop mutual trust, thus facilitating recognition and mobility of students and human resources within and across national borders of the continent
- ensure quality improvement/enhancement in higher education on the continent through self-assessment, external peer review and continuous monitoring and evaluation
- promote transparency and accountability by providing appropriate information on quality assurance to the public
- support higher education institutions to develop a sustainable quality culture
- promote international competitiveness of Africa's higher education system
- support the production of relevant teaching and learning resources as well as student assessment instruments (AUC, 2019a, p. 10).

The ASG-QA is based on three interlinked parts: 1) internal quality assurance; 2) external quality assurance; and 3) quality assurance agencies. Standard 7 of internal quality assurance includes the alignment between formulated programmes, learning outcomes and the level descriptors of national and regional qualifications frameworks, as applicable. The ASG-QA and African Quality Rating Mechanism (AQRM) are complementary and mutually supportive in developing a sustainable quality culture.

The AU Assembly first adopted the statutes of the PAU at its 20th ordinary session in January 2013. The PAU is an academic network of existing African institutions operating at graduate level. It is supported by the Association of African Universities. The PAU is expected to create high-quality continental institutions to bridge the educational gap between Africa and other parts of the world and to promote innovative teaching, learning and research within Africa. The PAU's objectives include: developing continent-wide and world-class graduate and postgraduate programmes in science, technology, innovation, humanities and social sciences and governance; stimulating collaborative, internationally competitive, leading-edge fundamental and economic growth-oriented research; and enhancing the mobility of students and academic staff among African universities to improve teaching and collaborative research. Article 14 of the PAU Statute provides for the establishment of an endowment fund based on voluntary contributions from AU member states, RECs and AU partners.

Lastly, the Revised Convention on the Recognition of Studies, Certificates, Diplomas, Degrees and Other Academic Qualifications on Higher Education in African States (Addis Convention), adopted on 12 December 2014 in Addis Ababa, provides another important component of the various policy instruments on the African continent. Its main proposals are:

- Strengthening and promoting inter-regional and international co-operation in the field of recognition of qualifications
- Defining and putting in place effective quality assurance and accreditation mechanisms at the national, regional and continental levels
- Encouraging and promoting the widest and most effective possible use of human resources available in Africa and of the diaspora in order to speed up the development of their respective countries and to limit African brain-drain
- Facilitating the exchange and greater mobility of students, teachers and researchers of the continent and the diaspora, by the recognition of qualifications delivered by other Parties in order to pursue higher education
- Furthering the setting up of high-level joint training and research programmes between higher education institutions and supporting the award of joint degrees
- Improving and reinforcing the collection and exchange of information for the purpose of implementing this Convention across the Continent
- Contributing to the harmonization of qualifications, taking into account current global trends (UNESCO, 2014c, article II).

1.3 Mapping study methodology

The ACQF mapping study focuses on the stocktaking and analysis of the state of play and dynamics of qualifications frameworks in Africa, especially national and regional frameworks. The study covers qualifications frameworks in Africa at different stages of development, consolidation and implementation through the collection and analysis of information and data from a diverse range of sources, including a desktop review, online survey and field visits to a country preselected for providing a range representative of the continent and its diversity (ACQF, 2019). The mapping study is presented according to the eleven thematic areas listed below. These themes, which provide a conceptual framework in which the analysis took place and are also used in subsequent chapters of this report to provide a common structure to the findings, are broadly

aligned to the categorisation and analysis of qualifications frameworks over many years. The themes are not intended to be comprehensive, but they do provide a useful organising mechanism for the reporting and synthesis of findings from the various sources of data collected. The eleven themes are (ACQF, 2019, p. 14):

1. *Legal, policy base of the qualifications frameworks*: legal acts and policies that underpin the qualifications framework.
2. *Governance*: leading institutions and key agencies; the role of social partners and other stakeholders; partnerships with sector councils; resources; indicators and mechanisms to support implementation and monitoring.
3. *Vision, scope and structure of qualification frameworks*: objectives and added-value for education and training systems, employability policies; levels and descriptors; scope (partial, comprehensive coverage of levels/sub-sectors of education and training; place of non-formal, informal learning and validation/recognition of prior learning).
4. *Quality assurance*: principles, policy, institutions, practice; registers; verification mechanisms.
5. *Learning outcomes*: concepts, application/use in different contexts (qualifications standards, curriculum, assessment) and sub-sectors (vocational education and training [VET], higher education); links with quality assurance.
6. *Credit systems*: concepts, specifications, transferability/pathways between technical and vocational education and training (TVET) and higher education qualifications; status of development/implementation.
7. *Alignment and referencing*: objectives, approaches, criteria and status of implementation.
8. *Databases and registers of qualifications*: types, uses; target users; governance, involved agencies.
9. *Costs and financing of NQFs and RQFs*.
10. *Dissemination, communication to end-users*: i.e.: learners, employers, education and training providers, career guidance advisors, employment/recruitment agencies; mechanisms, practice; platforms, use of digital tools.
11. *Role and place of RQFs in supporting development at national level*: e.g., clarity of learning pathways and permeability; promoting mutual trust; use of common QA principles/mechanisms; use of learning outcomes; innovation, renewal and reform of qualifications; improved methods and approaches for better qualifications; other aspects of the ecosystem of education and training (efficiency, effectiveness).

A sampling framework was also developed for the overall study. This framework was used primarily to select countries and RECs for the field visits. A contact database, largely provided by the AUC and then supplemented with contact details from the project team, formed the basis for the process. The database initially included 39 AU member states, which were invited to participate in the survey. Stakeholders such as social partners, councils and associations were also invited. These core aspects of the research methodology are described below. In addition, the Theory of Change approach, outlined below, was considered as integral part of the approach.

1.3.1 Theory of Change approach

The methodology for the mapping study included the development of a Theory of Action (ToA) and an early Theory of Change (ToC) that was developed for the ACQF with inputs received during the launch workshop of 2–3 September 2019 in Addis Ababa². This approach is somewhat unconventional and it is hoped that the early progress made with it will lay a foundation for the feasibility analysis and scenarios (planned for 2020–21), as well as the policy and technical processes (planned for 2021–22). The draft ToC, indicated below, illustrates how the key output of this assignment and the anticipated next steps are expected to contribute towards enhanced intercontinental mobility, education, employability and human capital development. A set of preliminary indicators proposed for assessing the attainment of Year 1 milestones, and the outputs, outcomes and anticipated impact of the ACQF, provided a useful point of departure for the development of the instruments used for the online survey and the field visits.

The proposed indicators drew on the following relevant CESA indicators as outlined in the useful CESA Indicators Manual (AUC, 2016, p. 25):

4.2 Existence of a National Qualifications Framework

- Definition: A structure which allows Technical and Vocational Education and Training and Academic certifications to be significantly broadened, harmonized in line with industry requirements, unified and streamlined.
- Purpose: This indicator gives an indication of whether a country can catalogue the skills that are being produced and whether these skills can easily be compared across institutions and countries. A National Qualifications Framework which is aligned to a Regional Qualifications Framework presents opportunities for regional integration.

9.4 Inbound Mobility Ratio

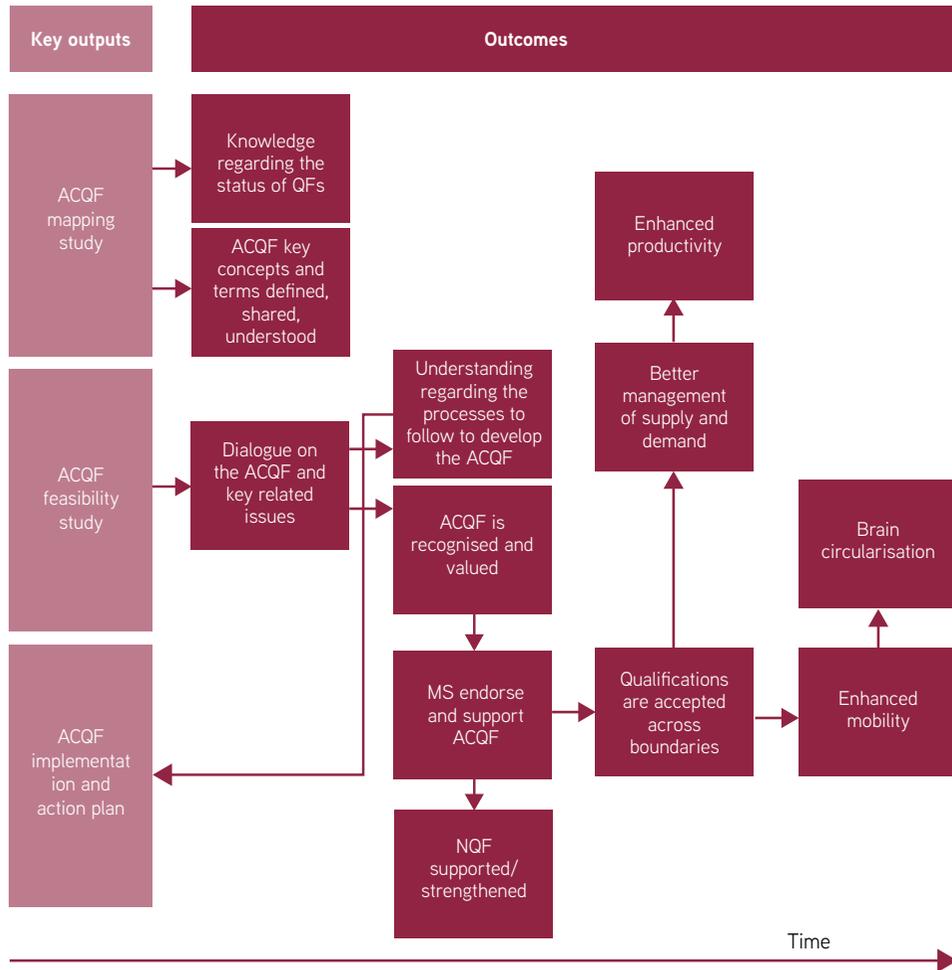
- Definition: The number of students from abroad studying in a given country, as a percentage of the total tertiary enrolment in that country.
- Purpose: To gauge the extent of the number of students studying in the country from abroad. This may give an indication of the value attached to the quality of a country's tertiary institutions by other countries.

9.5 Outbound Mobility Ratio

- Definition: The number of students in higher and tertiary education from any given country studying abroad as a percentage of the total tertiary enrolment in that country.
- Purpose: To gauge the extent of student outflow to other countries. It may indicate the perceived gaps and weaknesses of a country's tertiary sector.

The intention is that the ToA and early ToC would be reviewed at key points in the development of the ACQF, the next being the finalisation of the mapping study.

² ToC refers to the mechanism(s) through which change occurs, while the ToA explains how the intervention is constructed to activate the ToC – what the intervention does (Funnell & Rogers, 2011).

Figure 1: Draft Theory of Change for the ACQF

Source: Hazell (2019)

1.3.2 Desktop research

Through the desktop research, a collection of relevant information and data from published sources was gathered and categorised in an online inventory³. The inventory contains key sources such as countries' and RECs' policy, legal Acts and technical documents pertaining to the features, instruments and qualifications frameworks; existing NQF country fiches from the global inventories of qualifications frameworks (CEDEFOP et al., 2017a, 2017b, 2019a, 2019b); as well as descriptions and analytical reports, and alignment reports to RQFs. At present, the inventory is structured by country and REC, but this could be revised as more materials are added. The desktop research was consolidated in a synthetic paper finalised in March 2019, and then further

3 This inventory can be accessed [here](#) and will be further developed during the subsequent phases of the ACQF process.

elaborated in this mapping report. The research includes several international studies on qualifications frameworks, but is intentionally focused on available sources from the African continent.

1.3.3 Online survey

The online survey was conducted in two rounds and received responses from 33 of the 39 invited countries. The report analyses the responses and is focused on the responses submitted by the 29 countries during the first round (November 2019 to early January 2020).

The online survey was administered in three languages, English, French and Portuguese, using a Google Form⁴. The links to the various language versions were sent to key informants across the African continent. The survey was administered for two months between November and December 2019. A few late submissions were accepted in the second week of January 2020. The online survey was designed and finalised in close cooperation and with inputs from the thematic expert of the ACQF project team and shared for comments with the other members of the same team. The base questionnaire developed for the inaugural ACQF workshop was reviewed by experts covering all three languages. The final agreed set of questions was then used to obtain the initial global information across all RECs and all countries to ensure consistency.

In accordance with the inception report, the initial invitation to complete the survey was followed up with reminders, with the aim of encouraging responses. The invitation and two reminders were sent by the ACQF project team. These messages included the survey link as well as a note, 'ACQF Mapping Study: Methodology and Organisation Short Overview'. The first invitation was sent on 4 November 2019, with the deadline for submissions being 22 November 2019; the first reminder was sent early December, and the third in the third week of December. All countries newly added to the ACQF contact database during the survey period were invited to complete the survey. The survey links were sent directly to key informants and responses closely monitored during the period. To encourage responses, JET and the ACQF project team decided to shorten the survey and did so by deleting the few questions dedicated to RQFs. The second and third reminders included only this shorter version. A facility was made available for attachments to be uploaded to survey responses⁵.

The survey aimed to gather basic information on the state of play and perspectives covering the largest possible number of AU member states. A total of 36 responses were received from 29 member states (multiple responses were received from Angola, Egypt, Ivory Coast, Morocco, Togo and Uganda) during the main implementation period (first round, November 2019 to January 2020). The responses are further disaggregated below. In a complementary (second) round of the survey (May to June 2020), four new countries submitted their responses (Chad, Ghana, Republic of Congo and Zimbabwe); and three supplementary responses were received from Cameroon, Ivory Coast and Nigeria. This elevates the total number of participating countries to 33, and of total submitted responses to 43. These last seven responses (May to June 2020) are not included in the tables below, but were considered in the analysis.

The online survey was further complemented by fieldwork, consultations and extensive analysis that form part of the study. It was not intended to be representative of countries, nor did it try to secure formal country responses.

4 Arabic-speaking countries were requested to complete the survey in one of the three administered languages.

5 The survey instruments can be accessed here: [English version](#), [French version](#), [Portuguese version](#).

Table 3: Sampling framework with responses from the online survey

RECs	Number of countries	Survey response*
Arab Maghreb Union (AMU)	5	1
Common Market for Eastern and Southern Africa (COMESA)	20	13
Community of Sahel-Saharan States (CEN-SAD)	29	15
East African Community (EAC)	6	3
Economic Community of Central African States (ECCAS)	11	4
Economic Community of West African States (ECOWAS)	15	9
Intergovernmental Authority on Development (IGAD)	8	4
Southern African Development Community (SADC)	16	10

Official language	Number of countries	Survey response
English	19	12
Portuguese	5	4
French	25	12
Arabic	7	3
Totals	55	29

* The total number of countries largely exceeds the 55 AU member countries due to double counting (many countries are members of several RECs).

Note: Totals vary because of multiple responses from Angola, Egypt, Ivory Coast, Morocco, Togo and Uganda, as well as incomplete responses.

1.3.4 Technical visits to countries and RECs

Field visits built on the information collected during the survey and consisted of field visits to ten countries with NQFs, and engagement with three RECs, all with frameworks at different stages of development and consolidation (see Table 1). The sampling criteria to select the countries and RECs for the field visits was as follows:

Criteria 1: Coverage of all four languages spoken in Africa

The language/history of education systems in Africa (francophone, anglophone, lusophone) is important to recognise, and so at least one country in each language category was recommended. At least one Arabic-speaking country was also proposed.

Criteria 2: Coverage of different stages of development/implementation of NQFs

The inclusion of countries that span different levels of NQF development based on information from desk review and global level survey responses was recommended⁶. The following categories were used:

⁶ This set of simplified categories was proposed to allow for consistency in responses during the online survey. The more detailed cyclical categorisation of the stages (explorative, design, adoption, activating, operational, to review) (Deij, 2019) is used for analytical purposes later in this mapping report.

1. not in place
2. early thinking, first steps
3. in development and consultation
4. in place, legal base approved, started implementation
5. in place for some time and reviewed.

Criteria 3: Coverage of different African geographical regions

It was recommended that the following geographical regions were covered as far as possible: north, central, east, southern, west and the Horn of Africa.

Criteria 4: Link with three selected RECs, which are more advanced on RQFs

Following the advice of the ACQF Advisory Group, ECOWAS, the EAC and SADC were selected for the regional case studies. These three RECs were proposed based on criteria of being well-functioning and having worked on education and training, qualifications frameworks and being involved in the free movement of people (not just goods and trade).

Table 4 shows the countries and RECs that were selected and visited in late 2019 and early 2020. No country visit was conducted to Cape Verde, due to the constraints of the Covid-19 pandemic, but data and information collection was possible thanks to online meetings and exchanges with the Coordination Unit National Qualifications System (UC-SNQ) (NQF coordination unit) and open access to a very rich set of documentation of a policy, legal and methodological nature, and all qualifications registered in the online National Catalogue of Qualifications.

During the country visits, interviews were conducted with a set of agreed stakeholders, and in consultation with the relevant ministry, qualifications agency or REC. The interviews included representatives from the following:

- › the world of work – employers and employer associations;
- › education and training providers (TVET, schooling and higher education);
- › student bodies (focus groups);
- › ministry officials – education, labour and migration;
- › agencies: quality assurance, assessment and examinations, alphabetisation, distance learning, and education research and development;
- › qualifications authorities;
- › observatories of labour market and economic sectors;
- › local and international development agencies; and
- › professional bodies⁷.

⁷ The country and REC reports are available separately and can be found [here](#).

Table 4: Country and REC selections

Country/REC	Member of REC	Language	Geographical area	Date of visit
Angola	ECCAS & SADC	Portuguese	South	25–30 January 2020
Cameroon	ECCAS	French	Central	9–11 March 2020
Egypt	COMESA & CEN-SAD	Arabic	North	22–23 January 2020
Ethiopia	IGAD	English	Horn	10–13 February 2020
Kenya	COMESA, CEN-SAD, EAC & IGAD	English	East	8 January 2020 & 20–24 January 2020
Morocco	CEN-SAD	Arabic & French	North	9–12 December 2019
Mozambique	SADC	Portuguese	South	20–24 January 2020
Senegal	ECOWAS	French	West	6–11 January 2020
South Africa	SADC	English	South	4–13 February 2020
Togo	CEN-SAD & ECOWAS	French	West	10–13 February 2020 & 15–30 April 2020 (online)
EAC and IUCEA		English, French	East	4–7 February 2020 (partly online)
ECOWAS		French, English, Portuguese	West	7 March 2020 (online)
SADC		English, French, Portuguese	South	21–23 January 2020

All field visits used the same data collection instruments and took place over a period of three days. The number of interviews and focus groups was limited to what was feasible within this period, although some follow-up was possible using Skype or telephonic interviews. The field visit reports were quality assured and reviewed for consistency and accuracy. All field visits were completed by the end of March 2020, when the constraints of the Covid-19 pandemic had started. Nine of the field visits were conducted by the JET research team, while four visits were concluded by the ETF expert, who assured the content coordination of the ACQF development project.

Moreover, the ETF conducted the research and drafted the report on the Cape Verde NQF, a case added to the mapping study from the end of March 2020, during the rigours of the pandemic.

The seven peer learning webinars, organised from July to October 2020 by the ACQF project, updated and deepened information on the state of play, new developments and plans of twelve African NQFs and two RQFs⁸, adding value to the knowledge gathered through the above-mentioned sources.

The review process of the country and REC reports included three main layers. The first was internal and combined inputs from the international peer reviewers (focused on consistency), with substantive content review by the ACQF project expert (from the ETF). Another layer was based on exchanges between the authors and country/REC interlocutors for inputs. The final layer was initiated and managed by the ACQF project expert and consisted of a formal review of the reports by the countries and RECs' contact persons. While some countries and RECs did not react with comments, most engaged actively in the review process, gathered views from the national partner institutions and provided well-structured inputs, contributing to the quality of the final reports. To facilitate future dissemination among stakeholders, translation into French and Portuguese was organised by the ACQF project. The reports for Angola, Cape Verde and Mozambique are available in English and Portuguese, while the reports for ECOWAS, Morocco, Cameroon, Senegal and Togo are published in English and French. Due to the fluid nature of these developments, the country and REC reports were finalised as working documents and the point made that additional information would be welcomed – contact details were provided for this purpose.

The initial plan of two stakeholder consultations to be organised by the ACQF project included two workshops in 2020 (early April and the end of July) for approximately 90 delegates representing RECs, ministries and qualifications authorities from AU member states, regional education councils and associations, social partners, students' unions and independent experts. These conventional workshops were replaced by webinars in May 2020, organised in three separate instances, covering English, French and Portuguese language groupings. The sessions were very well attended and allowed the research team and the ACQF project the opportunity to share the findings of the online survey.

In addition, a comparative analysis of selected qualifications frameworks was conducted, based on the technical elements of referencing (internationally, but by and large in Europe), and the more contextually appropriate concept of alignment currently being used in SADC countries. A selection of available qualifications was analysed across the NQFs and RECs visited during the fieldwork, as well as available level descriptors. These additional elements are integrated into this mapping report, together with the data collected during the desktop research, field visits and the online survey.

Following the three ACQF webinars carried out in May 2020 to share and discuss with the stakeholders the preliminary findings of the online survey, the ACQF project team decided to open a second round of the survey, with the aim of broadening the number of countries contributing to the mapping study. Using the same survey instrument, responses were submitted by new countries (Chad, Ghana, Republic of Congo and Zimbabwe). In this second round additional responses, with complementary data, were received from Cameroon, Ivory Coast and Nigeria.

8 NQFs: Kenya, Mozambique, Mauritius, Lesotho, Angola, Ghana, Egypt, Zimbabwe, Zambia, Cape Verde, South Africa, Sierra Leone. RQFs: SADCQF and EAQFHE.

1.3.5 JETStreaming

JETstreaming is a capacity building programme in education research involving a combination of experiential workplace immersion and formal/collaborative training processes. The programme seeks to build self-driven, continually learning, social justice change agents in education research in Africa. The programme was established by JET in May 2020 with ten young graduates from South Africa. JETstreaming was also introduced into the ACQF project with the aim of providing an opportunity for young researchers from three African regions (the EAC, ECOWAS and SADC) to develop research skills and work experience. However, due to Covid-19 and lockdown restrictions imposed by national governments around the world, we were only able to recruit two of the envisaged four streamers; the two are from South Africa and ECOWAS in Abuja. The two streamers were contracted for five months. Primarily, the main role of the streamers was to assist the project team with fieldwork and literature gathering within their respective regions. The secondary role was to provide assistance to regional offices such as the EAC, ECOWAS and SADC. The programme played an important developmental role for the two young researchers, particularly in the areas of NQFs, the African education landscape and the development of ACQF.

1.4 Structure of mapping report and resource tools

This report is structured by means of the main findings from the various activities undertaken by JET since the inception of the ACQF project. These include desktop research, the presentations at the inaugural workshop held by the ACQF project in Addis Ababa in September 2019, and the consequent meeting of the ACQF Advisory Group. The desktop research consisted of exploring sources such as policy, legal Acts and technical documents of countries and RECs that clarify the features and instruments of qualifications frameworks; global inventories of qualifications frameworks (CEDEFOP et al., 2017a, 2017b, 2019a, 2019b); reports of alignment to regional qualifications frameworks (Mauritius Qualifications Authority, 2020; SADC, 2018; SAQA, 2020; Seychelles Qualifications Authority, 2020); websites of national ministries, agencies and research centres; and qualifications registers.

The mapping study benefited from updated information presented by the relevant national institutions during ACQF peer learning webinars held by the ACQF development project between May and September 2020. NQF experiences from Angola, Cape Verde, Ghana, Kenya, Lesotho, Mauritius, Mozambique, Rwanda, Seychelles, Sierra Leone, South Africa, Tunisia, Zambia and Zimbabwe were shared during these sessions.

This mapping report is intended to act as a resource for countries, RECs and also for the next phase of the ACQF process. In addition, the mapping report provides a set of online tools and templates for policymakers and researchers working in this discipline⁹. Each of the tools is presented in the format below, and includes the following:

- › ACQF inventory
- › Analytical framework of NQFs and RQFs in Africa
- › ACQF Qualifications Profiles
- › Analysis of level descriptors

⁹ The tools and templates were developed using a Google platform. Copies need to be made by the individual user to allow for editing rights. It is envisaged that over time, these tools will be refined and migrated to the ACQF website.

Description	Tool/template	URL
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The desktop research, various discussions and next steps outlined during the inaugural workshop, and Advisory Group meeting were compiled into a synthesis report, the content of which, together with that of the online survey report, have informed Chapter 2, which unpacks qualifications frameworks in Africa and beyond. The online survey was addressed to all AU member states and RECs to get the broadest coverage possible. The survey covered the key dimensions of the thematic blocks listed earlier in this chapter. Chapter 3 draws on the findings from the online survey, as well as the various country visits, reports that followed these visits and complementary information collected during the peer learning webinars in July–October 2020. The country visits attempted to gain a deeper understanding of qualification frameworks across the continent, and as such served as a deep dive into the country contexts and built on the broader knowledge obtained from the online survey. Again, these country report findings were collated around the thematic blocks. Chapter 4 explores the international considerations for the ACQF, while Chapter 5 is forward looking, by noting the implications of this mapping study phase for the next phase of the ACQF development process.



2

TOWARDS HARMONISATION OF QUALIFICATIONS IN AFRICA

Key points

- The notion of harmonisation is peculiar to the African continent. This strong intent to 'make the systems the same to facilitate working together' underlies many of the African initiatives, including quality assurance and qualifications. A key constraint in the progress towards this intended harmonisation is the fact that conceptual and policy clarity on the objects of harmonisation is still being put together by the national, regional and continental actors. In this report, the notion of harmonisation is not synonymous of standardisation, but of comparability, transparency, convergence, mutual understanding between approaches, methods and systems.
- The African Continental Qualifications Framework (ACQF) is being conceptualised in a period of intensive transformation of the fundamentals of work, job tasks, skills development, learning modalities and technology, and recognition of learning outcomes. For the first time, the World Economic Forum's Top 10 Skills 2030 include skills such as 'active learning' and 'learning strategies'. The ACQF will contribute to continental strategic aspirations and objectives, such as economic integration, a common education space, learners' and workers' mobility and recognition. As a hub of mutual support, the ACQF will interact with national and regional qualifications frameworks and enable the continent to reach the innovation and transformation it has committed to.
- The use of learning outcomes to transform learning and qualifications and make them more responsive to demand and more learner-centred has become pervasive internationally, and Africa has been part of this shift for many years.
- Over the last four decades, qualifications frameworks have been developed at sectoral levels, sometimes within a country and in other instances across countries, but limited to a sector, and on transnational levels. The most prevalent instances have, however, been on national and regional levels.
- The development of qualifications can be summarised into five key periods. The fifth and most recent period is pointing towards more global reference points, as well as a greater orientation towards technology, but also a removal of the traditional boundaries between formal, non-formal and informal learning.
- Methodological considerations for the comparison of qualifications and the levels at which qualifications are located across Africa are not well developed, but progress has been made in recent years. These emergent methodologies can be further refined in the ACQF process and provide a strong basis for a more robust harmonisation methodology that can be further developed and employed during the ACQF process.

2.1 Introduction to global NQF developments

The literature regarding qualifications frameworks can at times be confusing given the range and variety of qualifications and even terminology as these initiatives have evolved. Qualifications frameworks are an aspect of a nation's qualifications system, which in turn is a component of the broader education and training system. Qualifications systems can be defined as including all the structures and activities that lead to the award of a qualification (Bjørnåvold & Coles, 2010), including operationalising policy on qualifications, institutional arrangements, quality assurance processes, assessment and awarding processes (Tuck, 2007). The European Centre for the Development of Vocational Training (CEDEFOP) (2014c, p. 207) defines a qualifications framework as

an instrument for the development and classification of qualifications (e.g. at national or sectoral level) according to a set of criteria (e.g. using descriptors) applicable to specified levels of learning outcomes.

Ron Tuck (2007, p. v) describes a qualifications framework as

an instrument for the development, classification and recognition of skills, knowledge and competencies along a continuum of agreed levels. It is a way of structuring existing and new qualifications, which are defined by learning outcomes.

Tuck (2007) explains that the scope of frameworks may address all learning achievement and pathways – known as national qualifications frameworks (NQFs) – or may be confined to specific education sectors (for example, Technical and Vocational Education and Training [TVET]) – known as sectoral qualifications frameworks. Typically, a qualifications framework acts as a classification device for qualifications according to a hierarchy of levels of complexity and, in many instances, they also have a volume of learning measures.

While qualifications frameworks are best known for their national applications, hence NQFs, the emergence of regional qualifications frameworks, or RQFs, has grown out of communities of countries with the aim 'to facilitate mutual trust in qualifications and promote student and worker mobility; therefore, they are linked to other initiatives related to mutual recognition of qualifications, of goods and of services' (Bateman & Coles, 2015, p. 19). There is considerable variation in the characteristics of RQFs and they vary in their purposes, coverage of sectors, design and their use (Keevy et al., 2010; Tuck 2007). Some RQFs act as a common reference framework (for example, the European Qualifications Framework [EQF] and Association of Southeast Asian Nations [ASEAN] Qualifications Reference Framework [AQR]), whereas others are extended and aim for some common standards, be they qualifications or competency standards (for example, the Caribbean Community [CARICOM], the Southern African Development Community [SADC], or the Pacific Register of Qualifications and Standards [PRQS], which includes a set of quality standards for quality assurance agencies and providers, as well as a qualifications framework and extends to regional/common qualifications).

An RQF or a common reference framework could be defined as 'a means of enabling one framework of qualifications to relate to others and subsequently for one qualification to relate to others that are normally located in another framework' (Commission of European Communities, 2005, p. 13) or a 'broad structure of levels of learning outcomes that is agreed by countries in a geographical region. A means of enabling one national framework of qualifications to relate to

another and, subsequently, for a qualification in one country to be compared to a qualification from another country' (ASEAN, 2018, p. 33).

Tuck (2007, p. 6) states that 'a common reference framework respects well established national traditions while simultaneously providing a clear basis for mutual recognition and mobility of labour'. He also points out that many countries have a long-established qualifications system (not necessarily qualifications frameworks) while others have been engaged in the processes of reform and he says that a common reference framework will strengthen a common understanding and cooperation. A core purpose of an RQF is 'enabling NQFs and national qualifications systems to align with or "talk to" each other' (Burke et al., 2009, p. 29). Over the last four decades, qualifications frameworks have also been developed at sectoral levels, sometimes within a country, and in other instances across countries but limited to a sector, and on transnational levels (COL & SAQA, 2008). The most prevalent instances have, however, been on national and regional levels. Table 5 provides a summary of the different functions and rationales of national and regional qualifications frameworks.

Table 5: Functions and rationales of national and regional qualifications frameworks

Area of comparison	Level of qualifications framework	
	National	Regional
Main function	To act as a benchmark for the level of learning recognised in the national qualifications system	To act as a translation device to enable comparison of levels of qualifications across member countries
Developed by	National governments, in many cases through national agencies set up for this purpose	Countries in a region acting jointly, mostly facilitated by a regional body or regional association
Sensitive to	Local, national and regional priorities (e.g. levels of literacy and labour market needs)	Collective priorities across member countries (e.g. enabling mobility of learners and workers across borders)
Currency/value depends on	The extent of regulatory compliance required; the level of buy-in from key roleplayers (such as industry, learning institutions and professional associations); the perceived or real value to the broad population	The level of trust between member countries; the transparency of national quality assurance systems; mutually agreed regional priorities
Quality is guaranteed by	Adherence to nationally agreed quality assurance systems, exemplified in the practices of national bodies and learning institutions	The common application of the referencing criteria and guidelines, as well as the robustness and transparency of the national referencing process and national quality assurance systems
Levels are defined by reference to	National benchmarks, which may be embedded in different learning contexts, e.g. school education, work or higher education	General progression in learning across all contexts that is applicable to all countries

Source: Coles et al. (2014), adapted from Bjørnåvold & Coles (2008)

2.2 Evolution in qualifications frameworks, 1980–2020

The real or perceived importance of qualifications frameworks rests in the value placed on qualifications themselves and the commitment to lifelong learning. The Organisation for Economic Co-operation and Development (OECD) (2006, p. 21) states that a ‘qualification is achieved when a competent body determines that an individual has learned knowledge, skills and/or wider competences to specified standards’, but more importantly a ‘qualification confers official recognition of value in the labour market and in further education and training. A qualification can be a legal entitlement to practice a trade.’ The rise of qualifications frameworks since the late 1980s reflects the increasing interest in learning outcomes and in lifelong learning, combined with the societal value placed on explicit forms of recognition, as highlighted by the OECD. Much has been written about these developments over the last four decades and it is not our intention to repeat this here; suffice to say that this is not an uncontested domain, nor is it one that has remained unaffected by the technological advances in recent years, and critically as mentioned earlier, also by the reprioritisation of funding and systems that Covid-19 has introduced (ADEA, 2020).

In brief, the development of qualifications can be summarised into five key periods, described below. We draw on the categorisations provided by many authors over the period and adapt for applicability in this mapping study from Coles et al. (2014) and Coles (2017).

2.2.1 Period 1: Pre-qualifications frameworks

Period 1 was essentially a pre-period in which qualifications were seen as policy instruments and not quite formalised into what are now called NQFs. Mike Coles (2017) describes this as a period during which governments were driven by economic and social objectives, requiring increased participation, more consistent outcomes and greater relevance of provision. Some argue that this period started as early as the 1970s, but it is more likely that the developments in Scotland and elsewhere in the UK in the early 1980s constituted the early elements of NQFs, even if not always explicitly described as such. These strong Anglo-Saxon roots, combined with a developed country context, are important to consider and were often not taken seriously enough as other countries and regions started to follow the early trend.

2.2.2 Period 2: Early-generation NQFs

Period 2 is really the period of the formal establishment of NQFs, which took place in the 1990s and was initiated in anglophone countries (such as Australia, New Zealand, Ireland, Scotland and England) and one francophone country, namely France (Charraud, 2012). The development of these ‘first-generation’ qualifications frameworks was linked to the focus on outcomes-based vocational education and training systems within these nations, to a shift of responsibility of development of qualifications from providers to users, and also a shift in recognising that learning also occurs in work and through life experiences (Coles et al., 2014; Coles, 2017).

South Africa and Malaysia soon led a ‘second generation’ of NQFs that quickly started to develop (Coles et al., 2014) and were followed by several other countries across the globe. At the same time, in higher education, there was an expansion of participation and increased flexibility of programmes, including modularisation or unitisation, use of learning outcomes and exploration of credit arrangements (Coles et al., 2014; Coles, 2017).

This was also the period during which a new taxonomy to describe NQFs started to emerge, with the work of Michael Young (2005), David Raffe (2009) and Ron Tuck (2007), and from a

French perspective, Annie Bouder (2003), leading the thinking. The purpose and scope of NQFs stood out as useful descriptions that have been used since then. Raffe (2009, 2013) has suggested three broad purposes of NQFs, ranging from reforming (to incrementally change and improve a system) to transforming (to make drastic changes to a system that may not otherwise have been possible) and communication (an NQF that largely describes the existing system and tries to make it more accessible to the public). The scope of NQFs was outlined as being from partial to comprehensive. Over the last few decades, partial frameworks have been referred to more often as sub-frameworks and also linked or tracked frameworks, which cover only specific sectors of education and training systems. Commonly this would be higher education, TVET or general education, although very few examples of the latter exist. There are other examples, such as a specific industry sector, such as marketing or teaching, that develops international qualifications located within a qualifications framework that may cover many countries but focuses only on one sector (CEDEFOP, 2012). Comprehensive frameworks cover entire education and training systems and are also referred to as unified frameworks. Both purpose and scope remain in use in modern-day NQFs and are also applied in this mapping study. The developments in Period 2 led to a need to create consistent titles and a hierarchy of qualifications, so as to create a structure for how qualifications are viewed and understood to the present day.

2.2.3 Period 3: Third-generation NQFs and emergence of RQFs

During Period 3, a 'third generation' of NQFs started to be developed across Asia, Europe and Africa. Policy borrowing (Chakroun, 2010) became an unfortunate characteristic of this period, which was accompanied by significant prioritisation by most international development agencies, although the International Labour Organisation (ILO) was somewhat sceptical. This was also a period that saw the emergence of RQFs to support free trade agreements and facilitate learner and worker mobility, including those in Europe, the Pacific and the Caribbean. The Global Inventory of Regional and National Qualifications Frameworks 2019 (CEDEFOP et al., 2019b) identifies the EQF, the European Higher Education Area (EHEA) and, later, the AQRf as the regional frameworks that were developed and operationalised during this period. This trend towards cross-border frameworks was important because it demonstrated possibilities beyond the nationally bound NQFs and soon grew to include also transnational (COL & SAQA, 2008) and intra-national or sub-sector frameworks (Keevy et al., 2010).

2.2.4 Period 4: Global expansion

Period 4 saw the development of further qualifications frameworks, influenced by the architecture of these RQFs (Coles et al., 2014; Coles, 2017) and further interest in developing RQFs in other regions, such as in SADC (SADC, 2011) and also Arab states (National Qualifications Authority United Arab Emirates, 2012). The pull and push of the emerging RQFs cannot be ignored, as they undoubtedly created a strong demand for NQF development in their regions. Both Europe and ASEAN stand out in this regard, where the EQF, EHEA and AQRf have resulted in virtually all member states developing NQFs. In Africa, the trend towards RQFs was somewhat delayed. Even though the thinking around the SADC RQF started as early as 1992 (SADC Secretariat, 2017b), predating the EQF and AQRf, it never really got off the ground and was only formally established in 2018 (SADC Secretariat, 2019). Developments in the East African Community (EAC) and Economic Community of West African States (ECOWAS) regions have been underway at least for the last five years and, more recently, the Intergovernmental Authority

on Development (IGAD). These new RQFs, and many of the emerging NQFs associated with them, have been beset by resource limitations and lack of political will to move from the conceptualisation to implementation phase. The Ethiopian NQF is a case in point, with huge progress made from 2008 to 2010, but then extraordinarily little after that. The Global Inventory of Regional and National Qualifications Frameworks 2019 (CEDEFOP et al., 2019b) does not provide an estimated number of national qualifications frameworks, but does provide summaries of over a hundred country frameworks and seven RQFs currently in place. Period 4 was a period during which some of the momentum of the preceding periods was lost, which resulted in the present-day situation in which there is still a lot of attention on NQF and RQF development, but the operationalisation of new frameworks has become doubtful.

The Global Inventory of Regional and National Qualifications Frameworks 2019 (CEDEFOP et al., 2019b, p. 9) notes that qualifications are making inroads into Africa, Asia, Pacific and in 'the European neighbourhood of Eastern Europe to the Southern Mediterranean'. However, it also points out that

[Progress of qualifications frameworks is uneven] hampered at governance and institutional levels by weak coordination of stakeholders, insufficient cooperation between different sectors, and an absence of adequate regulatory oversight. [Qualifications frameworks] are also held back in implementation by poor quality of training provision, insufficient opportunity for teacher continuing professional development, and uneven application of outcomes in curricula and qualifications.

The Global Inventory also recognises one of the most pressing and evolving challenges to qualifications frameworks: the 'digitisation of economies and societies' (CEDEFOP et al., 2019b, p. 9). It notes that digital technologies are 'creating new opportunities and challenges for skills development and recognition globally'. Changes in modalities of access and learning methods and internationalisation are increasing, along with the offering of 'new credentialing methods and systems that can capture, recognise and validate a broader range of learning outcomes in the era of lifelong learning' (p. 26). The importance of qualifications frameworks is aptly summarised in the Global Inventory: they 'are instruments not only for collating and comparing qualifications, but also for activating them as enablers of systemic – and societal – diversity and development' (p. 10).

Coles (2017) suggests that NQFs may have increasing conformity of levels, but will be varied by the diverse ways that the framework is linked to national policy priorities, including 'funding arrangements, recognition/validation policy' and quality assurance arrangements. He notes that evidence from the oldest frameworks suggests that the link with quality assurance processes make the NQF effective. Andrea Bateman and Chloe Dyson (2018) indicate that there are two ways of viewing NQFs and related quality assurance arrangements. The first, as noted by Bateman and Coles (2016), is that in some cases an NQF incorporates quality assurance arrangements. Second, an 'NQF is simply seen as a catalogue or classifier of all qualifications in a country, with little reference to quality assurance arrangements of these qualifications' (Bateman & Coles, 2016, p. 14). Coles (2017, p. 24) expands on this notion and notes that it is possible to view

quality assurance processes and their governance as independent of the national framework. In this role, the NQF can be seen simply as establishing the levels and level descriptors which qualifications must meet. The ways in which these qualifications are designed, assessed and certified are all independent of the NQF and can be quality assured independently of an NQF.

2.2.5 Period 5: Convergence of methodologies, digitalisation and a search for independent reference points

The current state of the development qualifications frameworks, or Period 5, points towards a consolidation of the functioning RQFs and NQFs, with some new developments on the horizon – the ACQF being the most recent. In Europe, there is a trend towards enhanced comparison of qualifications, including with assistance of artificial intelligence, and renewed referencing of NQFs to the EQF, taking account of the current evolution and reforms of NQFs. Under the incentive of the *New Skills Agenda for Europe (2016–2020)*, emphasis was placed on the launch of the new *Europass* as an integrative and interoperable platform for citizens' more autonomous career management, *Europass* digital credentials and EQF information.

In the context of ASEAN, the *AQRF* is also increasingly well established and making a difference with its ten member states. A key feature of this current and future-looking period is a questioning of the predominance of formal education systems, while the marketplace seems to want more just-in-time and agile learning to take place.

Higher education institutions are opening up to new paradigms – ‘micro-credentials’ – and NQFs in many countries are preparing to engage with these new types of credentials. This tension is not new, but the technology to enable more flexible credentialing has certainly developed at an increased pace. Covid-19 has accentuated this tension, but it is clearly becoming a serious consideration for future qualifications frameworks, be they sectoral, national, regional or transnational. At one extreme, it could be argued that the qualifications frameworks will evolve to become more agile and more digital – examples in New Zealand and Malta show a clear trend in this direction (Council on Higher Education and Accreditation, 2019; Keevy & Chakroun, 2018).

At the other extreme, and beyond even what may be considered a fifth-generation qualifications framework, some may argue that this is the end of qualifications frameworks as we know them, and that new approaches need to be considered going forward. The current development of *World Reference Levels (WRLs)*, which is a ‘global tool to describe and compare an individual’s skills and qualifications’ and, like qualifications frameworks, ‘uses learning outcomes as their conceptual basis and common language’ (CEDEFOP et al., 2019b, p. 9) is important to take note of. The development of the *Credentials Framework for the United States* is another potential fifth-generation framework that has been under development since 2014 (Rein, 2011, 2016).

Concurrent with the development of qualifications frameworks, many complementary mechanisms to recognise learning, some even preceding qualifications frameworks, have developed. These include regional conventions, such as the *Lisbon Recognition Convention* that has been in place since 1997, the *Addis Convention* that came into force in December 2019, and importantly also the *Global Convention on the Recognition of Qualifications Concerning Higher Education*, the first legally binding United Nations treaty on higher education (UNESCO, 2019). The subsidiary text to the *Lisbon Recognition Convention* contains a specific recommendation on the use of qualifications frameworks in the recognition of foreign qualifications. NQFs facilitate recognition, especially when they have been linked in a transparent and comparative way – through self-certification and referencing – to the overarching frameworks such as the *EHEA* qualifications framework and *EQF Lifelong Learning (LLL)*.

Credential evaluation, which largely uses these conventions as a framework to operate in, has also been in place for several years and has grown in its ability to use outcomes-based approaches to facilitate the recognition of qualifications across countries. Several initiatives based on professional and occupational standards are also important to note, as well as learning metrics

used to measure competencies. Initiatives driven by the private sector, such as the WorldSkills standard specifications framework, and classifications systems, such as O*NET, the International Standard Classification of Occupations (ISCO), the European Skills/Competences, Qualifications and Occupations (ESCO), and the International Standard Classification of Education (ISCED) are also highly relevant.

Recognising and valuing non-formal and informal learning is of growing importance (Singh, 2015) and, linked to this, work-based learning. In the EU, the Council Recommendation on the Validation of Non-formal and Informal Learning (VNFIL), adopted in 2012, has boosted the development of policies, practices and research in this vastly diverse domain, including, with the support of CEDEFOP and the European Training Foundation (ETF), the biannual European Inventory on Validation. The evaluation of the Council Recommendation on VNFIL discusses and provides evidence on aspects and conditions for sustainability, including embeddedness in the wider education and training system, the role of learning outcomes approaches, involvement of stakeholders (such as employers), and targeted data collection and analysis. Some countries have invested significantly in strengthening and mainstreaming open and accessible systems of validation of non-formal and informal learning, in an attempt to overcome low qualifications levels in their population but, as a corollary, they have also invested in innovation. Portugal is an example of this: the Recognition, Validation and Certification of Competences (RVCC) system has evolved to provide users the new digital record of credentials – the *Passaporte Qualifica*. This ‘passport’ is an individual technological instrument for the registration of qualifications and competences acquired or developed over one’s adult life and can be used for guidance in learning pathways.

Period 5 of the development qualifications frameworks is certainly pointing towards more global reference points (note the WRLs and the Global Convention on the Recognition of Qualifications), a greater orientation towards technology (note the move towards digital credentials, and even the earlier trends towards Massive Open Online Courses [MOOCs]) and the removal of the traditional boundaries between formal, non-formal and informal learning (note the Credentials Framework in the United States and many private sector initiatives). It could be argued that the vision of lifelong learning espoused by the Delors Report in the 1970s (UNESCO, 1996) may be realised for the first time.

Time will tell how qualifications framework developments will evolve, but what is clearly evident is that there are many reasons why the ACQF cannot simply replicate its predecessors. New thinking on agile learning and recognition, combined with the progress of technology, provide a new template for the ACQF. Added to this is the unique African context in which the ACQF is being considered – not to mention the fact that the ACQF would have to interrelate with RQFs and NQFs on the continent. Of course, this situation is also an opportunity in the making. Resistance to importing colonial models, and a strong political will for increased harmonisation and integration, while harnessing the capacity of Information and Communications Technology (ICT), imbued in the African Union Commission’s Continental Education Strategy for Africa (CESA) (AUC, 2015a), provide a counterbalance that should be exploited.

Lastly, it is important not to confuse the five periods in qualifications framework evolution, as outlined in this section, with the actual stages of development of the qualifications frameworks. The evolution covers periods in the evolving design of the frameworks, whereas the development of a framework (within a period, or across multiple periods) moves in a cyclical manner from explorative and design to adoption and activating to operational and review stages (Deij, 2019, p. 2):

For frameworks to work optimally, they need to constantly evolve and adapt to changing situations and needs of different stakeholders. Evaluation is thus a constant feature of framework developments. For this reason we present the stages as a cycle; signalling the continuous and iterative nature of NQF developments.

The proposed sequencing of stages used in the analysis of the ACQF mapping study is conceptually close to the above, notably: 1) not in place; 2) early thinking (first steps to develop); 3) in development and consultation; 4) in place (legal Acts approved, implementation started); and 5) in implementation for some time and reviewed.

2.3 The origins of qualifications frameworks

A discussion on qualifications frameworks in Africa would be incomplete without reflecting on the origin of the phenomenon, more so when the expressed collective intent is to consider the development of a continental qualifications framework. It has been pointed out that the first generation of NQFs had direct Anglo-Saxon influences, with some French influence (Keevy et al., 2011). Even earlier are the antecedents of this first generation, which are contained in the history. Underlying these periods are strong power shifts, notably from religious institutions to nobility, to guilds, to providers of training, and even to employers at the turn of the twentieth century. The increasing central role of government across these shifts is quite pronounced, while in more recent times, notably through international collaborations and more open approaches to learning, the powerful role of the learner as architect of the learning process, as opposed to the recipient, has started to emerge.

We can trace the origins of formal systems to recognise learning all the way to ancient civilisations such as Greece, Rome and China. In these ancient cultures, there were no specialised career structures, with the focus more on international citizenship than on vocational preparedness, which we are more occupied with in the modern world (De Villiers, 1997; Serpell, 2007). New economic objectives as a result of the Crusades and the development of banking, importing and shipping across Europe and the West gave rise to the development of cities, and a new form of education aimed at professional life. Education became available to the middle classes and the merchant and craft guild system developed. By the eleventh century, universities with the specialised field of education were developing in Europe, largely in reaction to the previous narrow religious doctrine. This was also the time when the term 'qualification' acquired a more definite meaning, but retained its emphasis on social class structures. As is well documented, education development then accelerated in Europe, developing a unique focus that soon became foreign to similar developments in Africa, and resulted in an extremely negative impact during colonisation (Higgs & Keevy, 2009).

The nineteenth century brought a wave of liberalism and consciousness of equal rights and opportunities, accompanied by increased urbanisation and bureaucratisation (De Villiers, 1997). The increased need for a skilled workforce eventually resulted in an emphasis on credentials that persists to the present day. Learning at this time, and well into the twentieth century, was controlled by providers of training, using curriculum-based approaches that were largely input-driven. The status quo was not sustainable, and significant changes were experienced in the last three decades of the twentieth century. The Faure Report of 1972 introduced the notion of lifelong learning at a time when the impact of technology was still unclear, but with a strong emphasis on the contribution of non-formal and informal learning to formal/school-based learning. This was

later followed by the Delors Report (UNESCO, 1996), which proposed an integrated vision of education determined by the choices about the kind of society in which we wish to live. This was also the period in which the idea of NQFs gained traction, with roots in the competence approach to vocational education, and introducing the idea that all qualifications could (and should) be expressed in terms of learning outcomes, without prescribing a learning pathway or programme (Young, 2005). This shift to learning outcomes, as opposed to the strong curriculum-based approach, allowed an important new power shift to take place, this time from providers to employers. This shift was strongly influenced by the emerging neoliberal policies that emphasised the primary role of the private sector in economic development, as well as the importance of learner-centred education and training based on active and self-directed learning and the ability to make career choices (Allais, 2010).

An important question to ask in this mapping report is the extent to which the ACQF will become a proxy for an African approach to the comparability, transparency and recognition of qualifications/credentials, acknowledging diversity of learning, including longstanding traditions of apprenticeships, such as is found in many parts of the continent. The ACQF ought to be symbiotic with other continental policies, pre- and post-Covid-19, emphasising its unique and inclusive lifelong learning nature (not bound uniquely to a specific sub-system) and its openness to interacting with diverse systems and frameworks on the continent and globally. Care will have to be taken to consider this important foundational principle, together with the need for modernisation and the agile technology-infused recognition schema mentioned earlier in this chapter. Care will also have to be taken to recognise the role of the African Union (AU), the member states and Regional Economic Communities (RECs), and the social partners to lead and sustain this process.

2.4 Qualifications harmonisation considerations for Africa

2.4.1 Learning outcomes as common currency

The notion of the harmonisation of education systems is peculiar to the African continent. In the broader international context, more neutral terms such as alignment or comparison are more prevalent, but in Africa, notably in the SADC context, harmonisation is widely accepted and foregrounded in formal policy documents:

Governments and recognized institutions in SADC member states are expected to commit themselves to ensuring that Ministries of Education, Education Councils or Commissions, Institutional External Quality Assurance Agencies, institutions themselves and all other related organs, adhere consistently to agreed national and regional guidelines and standards for quality assurance as a means of *facilitating and promoting regional harmonization* of education systems, students' learning outcomes, achievement standards, competencies commensurate with the types and levels of courses pursued and qualifications earned (SADC, 2011, p. 17, emphasis added).

Several examples of a move to harmonisation are also evident in other continental initiatives. Examples include the Strategy for the Harmonization of Statistics in Africa, the AUC Programme on Harmonised Continental Regulatory Framework for the Energy Sector in Africa, Harmonizing

Policies to Transform the Trading Environment, and the Continental Higher Education Harmonisation Programme. This strong intent to ‘make the systems the same to facilitate working together’ underlies many of the African initiatives across the areas of quality assurance, learning outcomes, and the examples listed above. A key constraint in the progress towards this intended harmonisation – the SADC process is a case in point – is the lack of conceptual and policy clarity on the objects of harmonisation. The list above demonstrates this point, ranging from systems, to learning outcomes, to qualifications. While these objects are clearly interrelated, they are also quite different and require clear policy intent to achieve the goal of harmonisation. In this section of the ACQF mapping report, we try to unravel some of this interrelatedness from an African perspective, in an attempt to develop an approach that could be used more widely on the continent. In effect, harmonisation may be to the ACQF what transparency was for the EQF. In Chapter 3, we apply the approach to a sample of qualifications and level descriptors for illustrative purposes, but with the expressed caution that this application would have to be tested more broadly beyond the limited scope that was possible in the mapping study.

The use of learning outcomes has become pervasive internationally, and Africa has been part of this shift for many years. Many definitions can be found for learning outcomes, but what is common to most of these is an emphasis on a description of learning across specific domains across the continents:

- Africa: Contextually demonstrated end-products of learning processes that include knowledge, skills and values (NQFpedia).
- Europe: Statements of what a learner knows, understands and is able to do after the completion of learning (CEDEFOP, 2016, 2017).
- Asia: The AQRF is a hierarchy of levels of complexity of learning which use learning outcomes as the metric for the hierarchy (ASEAN, 2018).

An important distinction is also made between the description of intended learning and that of achieved learning. This distinction is illustrated in the application of learning outcomes in level descriptors, qualifications, qualifications profiles, occupational standards and increasingly also in learning programmes, courses and curricula (see Table 6 later in this chapter). There are also future considerations. The ability of all forms of learning – formal, non-formal and informal – to be captured through learning outcomes has been possible, but the application beyond the formal system has been limited to forms of Recognition of Prior Learning (RPL), which were mainly small scale and complex to implement. As noted in the recent UNESCO Institute for Lifelong Learning (UIL) report on embracing a culture of lifelong learning:

Education delivery must include providers that increase social and individual demand for a wider spectrum of knowledge and competencies and multiply potential learning pathways. This includes micro-learning offers and digital, mobile and blended learning activities (UIL, 2020, p. 22).

Thinking of learning in terms of credentials, and with a strong digital foundation, is opening up new opportunities for the use of learning outcomes (Dale-Jones & Keevy, 2020) around the world, including in Africa. We will return to this point in Chapters 4 and 5, as the ACQF process stands to benefit greatly from the new developments and should avoid the trap of simply following what was done before.

At the most abstract level, learning outcomes are used in level descriptors that provide broad indications of levels (vertical progression) and domains (horizontal differentiation) of learning intended to guide the development of qualifications in a sector, country or region. In turn, qualifications provide a hierarchy for curricula and learning programmes to be developed in more consistent and comparable ways. The vertical dimension, often between eight and ten levels, is guided through the use of taxonomies, while the horizontal dimension is mostly categorised into three to five domains of types of learning. These dimensions are described in detail below and form the foundation for a more structured and conceptually coherent formulation of learning outcomes across these applications. While domains vary, the notion has been used across most level descriptors. The vertical hierarchy, using taxonomies, is less well utilised and is mostly done through intuition rather than science. In Chapter 3, we apply the taxonomies to a select group of level descriptors and qualifications to demonstrate this point. A key finding is the need for great validity and reliability in these analytical methods. The move to increased automation, interoperability and the use of machine learning certainly provides promise for the future. The development of the WRLs (Hart & Chakroun, 2019), which provide a multidimensional approach to both the horizontal and vertical dimensions of learning, is also of interest and is briefly explored in Chapter 4.

Before moving to the harmonisation categories presented below, it is important to consider the strong influences of the underlying philosophical approaches that inform the formulation of learning outcomes (Keevy & Chakroun, 2015). Again, this is something that is often ignored, or at best, done implicitly. The two main theories influencing the formulation of learning outcomes are behaviourism and constructivism. The former privileges that which can be observed, while the latter focuses more on process and structure. Most qualifications frameworks have been strongly influenced by the behaviourist paradigm and this can be made more apparent, and to some extent more balanced, through the use of taxonomies with an underlying constructivist approach, such as the Structure of the Observed Learning Outcome (SOLO) taxonomy. This same problem exists in the use of the terms competence and competency and should not be simply regarded as a language preference. This point may appear insignificant, but in fact it is not, and great care should be taken during the next steps of the ACQF process to consider the different formulations of learning outcomes with greater conceptual clarity.

At this point it is important to consider a set of basic definitions of the different manifestations of learning outcomes and how these can be used to work towards increased harmonisation in Africa. Table 6 provides some guidance in this regard, specifically on how these terms have been applied in NQFs internationally. Learning outcomes are the common currency and are used across all these levels to describe contextually demonstrable end products of learning. Level descriptors are also described through learning outcomes and provide the hierarchy for qualifications to be structured according to set levels within a qualifications framework. Learning programmes are developed at the level of education and training providers, which add specific dimensions of assessment and content that guides the course and curriculum developer, and ultimately also the learner that completes the learning. At the most detailed level, a curriculum provides details about content that is very contextual and may include specific textbooks and assignments. At the highest level, a credential is a combination of the different types of learning a person acquires through their life journey and includes formal, non-formal and informal learning. Examples include curriculum vitae, professional designations (linked to licensing) and, increasingly, digital passports. There are exceptions to the hierarchy set out in Table 6, but it does

provide a basic framework for the discussion that follows and, hopefully, also for the future design of the ACQF.

This mapping study is primarily concerned with the qualifications dimension of harmonisation (Table 6, column C) and, more specifically, the harmonisation approaches that could be taken (cell C3). In this regard, it is important to note that the other dimensions are not less important; on the contrary, the complementarity and interdependency between dimensions A, B and C are important and strongly encouraged. The work underway on institutional levels (see column A), sometimes in countries, continentally, and even internationally, has been a feature of the education and training landscape for many years. Several initiatives that focus on the curriculum level (column B) are equally well established and form an important basis for building trust across borders (OECD, 2011a, 2011b). The new dimension of credentials (column D) is more nascent and less coordinated, but as the Covid-19 pandemic has shown, more digital mechanisms are part of the future. Included in this future will be new forms of quality assurance and critically, also a much stronger use of machine learning for analytical purposes and improved employability. The realisation of credential schema (cell D2) has been touted as the first realisation of the concept of lifelong learning initially thought of in the 1970s (UNESCO, 1996). The consideration of the ACQF is very timely, but it would be shortsighted to see it as fitting only in cell C2 in the table below. We will come back to this point in Chapter 5, but for now, the focus is on the mapping of current qualifications-related initiatives and, critically, the harmonisation methodologies that exist. A note of caution is also needed here. These methodologies (as elaborated on below) are not all fully developed and it was not possible for the purposes of the ACQF mapping process to simply apply them in an African context. In some cases, the methodology may be more widely applied, such as with the referencing/alignment of NQFs against RQFs, while in other cases, we have tried to elaborate on emerging methodologies at the levels of qualifications and level descriptors.

In the section below, we present four methodological considerations for the comparison of qualifications, and the levels at which qualifications are located, across Africa. It is important to note that these methodologies are mostly new and applied only within limited contexts, and mostly outside of Africa. Several current global developments suggest that this is a critical focus area for the global community at present and the ACQF has the potential of not only contributing to these discussions, but also deepening their understanding and their application.

The first example is drawn from the work of the ETF in this area, but applied outside of Europe (Bjørnåvold & Chakroun, 2017) and is based on the use of learning outcomes to compare qualifications profiles, specifically through the linking of a cross-border criterion (with the EQF as proxy) with an occupational purpose criterion (with ESCO as a proxy).

The second example, conducted in 2016 by the ETF, with the NQF Steering Committee in Morocco (ETF, 2016a, 2016b), was the inventory of existing (accredited) programmes and qualifications from TVET and higher education relevant for two occupational sectors (building and auto industry) (2016a, p. 3). This inventory was a component of the wider project developing (and testing) a methodology and instruments for analysis, levelling and registration of qualifications in the NQF register. The inventory resulted in an exhaustive listing of qualifications by levels of the NQF. The entries of the inventory are referenced to the appropriate *Répertoires Emploi-Métier* and *Référentiel Emploi-Compétences (REM-REC)* and to the underlying qualification design methodology – the *Approche par Compétences (APC, competence-based approach)* or other.

Table 6: Harmonisation categories

		A	B	C	D
		Learning programmes/ courses	Curricula	Qualifications	Credentials
1	Definition	A structured and purposeful set of learning experiences that leads to a qualification or part-qualification	A statement of the training structure and expected methods of learning and teaching that underpin a qualification or part-qualification to facilitate a more general understanding of its implementation in an education system	A registered national qualification consisting of a planned combination of learning outcomes that has a defined purpose or purposes, intended to provide qualifying learners with applied competence and a basis for further learning and has been assessed in terms of exit-level outcomes, registered on the NQF and certified and awarded by a recognised body	Representation of the different types of learning acquired by an individual across formal, non-formal and informal categories
2	Organising mechanism	Institution specific	Curriculum standards and/or frameworks	NQF, RQF with level descriptors	New credential schema – less formal and covers all types of learning
3	Harmonisation approach and methodologies	More limited, but may include cross-border articulation agreements	Tuning	Qualifications profiles Inventories Comparison of level descriptors Referencing and alignment of NQFs to RQFs	Organic, machine-based
4	Quality assurance	Peer review (HE), External (TVET)	Common guidelines INQAAHE AQAF APQN	Quality assurance is external and linked to the qualifications framework	Based on employability, Self-regulated

	A	B	C	D	
	Learning programmes/courses	Curricula	Qualifications	Credentials	
5	Other approaches and examples	Listings on a university of college website/yearbook	Regional standardised examinations in West Africa CAMES	Regional and global conventions Professional and occupational standards Learning metrics Occupational classification systems Educational classification systems WRLs UNESCO Qualifications Passport	Digital identity Skills passport LinkedIn account Europass citizen file

Further to the inventory, the exercise analysed the learning outcomes of a small sample of the listed qualifications (two from TVET and two from higher education) and compared them with the level descriptors of the targeted NQF level, applying the proposed methodology for levelling. Besides conclusions on the methodology, the testing was an occasion for a renewed reflection on the meaning of level descriptors versus learning outcomes/*compétences* formulated in different standards (competences, assessment).

The third example, drawing on what could be described as a more established international approach, uses level descriptors of NQFs as a basis for comparison. In this section, we draw on the attempt made in the SADC context in 2017 (Keevy et al., 2017) and also explored by CEDEFOP in 2018 (CEDEFOP, 2018a). This application of the analysis, presented in Chapter 3, is limited to available level descriptors across the NQFs and RECs studied during the ACQF field visits, as they reveal key features that need to be understood in order to provide appropriate policy and technical guidance to the ACQF project team. In this regard, it is important to note that learning outcomes-based qualification levels, described through level descriptors, mark a shift from a traditional approach – based on standardised programmes and courses – to a structure linked to levels of learning outcomes as reference levels. Each level is determined by a series of descriptors, which indicate the learning outcomes of the qualifications attributable to that level, in terms of knowledge, competences and ability that the holder of the qualification must have acquired, regardless of the system or the modality through which the qualification has been obtained (formal, non-formal or informal study path).

In the fourth example, we consider the approaches to referencing (and alignment as is used in the SADC context) of NQFs to RQFs. The methodology has been widely used in the European context and certainly provides important insights for Africa. Notably, example four contains elements of the other three examples and, as such, provides a useful framing for an approach that

would suit the ACQF process going forward. The four examples provide a common approach to the description of learning, through learning outcomes, and then locate qualifications in a consistent architecture, through NQFs and RQFs. This commonality reduces some of the complexity that often results in the conceptual muddling associated with many policy processes internationally, and in Africa. What remains is to find the analytical methods to apply these approaches and, if possible, to compare and integrate them if this is meaningful. The option of strengthening the referencing approach with these methods is appealing and is further explored below.

An additional layer of complexity is introduced when the Anglo-Saxon and French traditions and approaches to qualifications are added. This is further discussed in Chapter 4 and should be considered if the methodology is further developed in the ACQF context, which covers countries with systems influenced by English, French, Portuguese and Arabic traditions. A further layer, which perhaps needs to be better understood than at present, would be to consider both vertical levels and horizontal domains of learning – to some extent, this is explored below. Lastly, it may well be time to consider this analysis at a level beyond qualifications, by looking at credentials and specifically at the technological solutions that are increasingly becoming available to capture, recognise and compare learning through digital solutions that transcend the human capability for analysis.

The purpose across all four examples is similar, in that an attempt is made to find valid and reliable approaches to compare the learning described through learning outcomes, captured in qualifications and located on the hierarchical structures that NQFs and RQFs offer (see cells C2 and C3 in Table 6). Current trials suggest that these approaches all hold value, but they do not seem to have been more closely compared to date. The ACQF presents such an opportunity and we would invite the internal community to interrogate our proposed analysis and approach, as well as the application of the methodologies to the sample from African countries presented in Chapter 3 of this mapping report.

Obviously, the fixed reference points in these approaches are twofold: 1) learning outcomes are recognised to be the common approach to modernisation and reform (CEDEFOP, 2009d); and 2) qualifications frameworks are recognised to be the preferred organising mechanism for qualifications based on the complexity of learning outcomes. These two assumptions can be questioned and debated at length and we would encourage this, but the mapping report uses these as a point of departure in order to move towards increased conceptual clarity on the objects of harmonisation. To put it differently, we accept that NQFs and qualifications based on learning outcomes provide contemporary conceptual frameworks for the facilitation of recognition of learning in modern society. We acknowledge that these frameworks are far from perfect, but we have seen over the last three decades that they have been increasingly developed globally. We have also seen that the increasing number of external evaluations is showing promise (Jitsing et al., 2018), even with the many limitations being explicitly acknowledged. In addition, and as mentioned above, we are seeing a new futuristic move towards credentials that lie beyond NQFs, combined with some initial exploration of more neutral and global reference points through the WRLs (Hart & Chakroun, 2019), and suggest that the ACQF carefully consider this in the coming years. We will return to this in Chapter 5, but for now, we propose a deeper interrogation of the current trials being undertaken.

2.4.2 Methodological considerations

Example 1: Using learning outcomes to compare qualification profiles

The comparative study on qualifications across borders conducted by CEDEFOP between 2015 and 2016 on the role of learning outcomes in supporting dialogue between education and training and the labour market provides one of very few examples in this area (Bjørnåvold & Chakroun, 2017). The key objective of the study was, through a focus on learning outcomes, to understand the way vocational education and training qualifications are being defined, reviewed and renewed and how this influences their profile and content. The study focused on qualifications for four profiles commonly awarded in most countries of the world and described and compared their scope, profile and content: 1) bricklayer/masonry, 2) healthcare assistant, 3) hotel assistant/receptionist, and 4) ICT service technician. The study also attempted to cover a wide set of 26 countries that had introduced NQFs and included 5 African countries, 2 from Asia, 12 from Europe, 1 from the Gulf region, 3 from Latin America and the Caribbean, and 2 from the Pacific region. This wide scope makes the study of particular interest to the ACQF process.

The methodology was based on the analysis of the intended learning outcomes of each qualification, based on three criteria drawn from a range of contextual sources of the selected qualifications, leading to a set of qualification profiles (spider charts). The following criteria were considered by CEDEFOP.

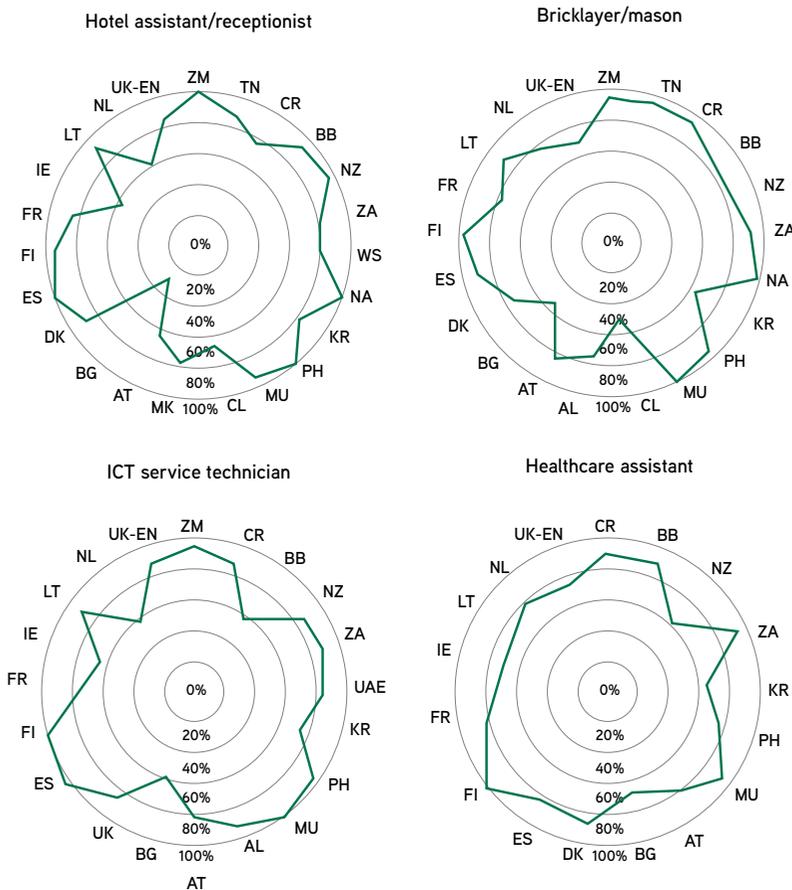
Table 7: Qualifications comparison criteria used by CEDEFOP (2016)

Criterion	Examples	Description and notes
Local/national qualification reference points	NQFs	In order to limit the number of variables when comparing qualifications, the sample is taken from countries that have NQFs in place. These NQFs, their level descriptors and other levelling instruments provide a fixed national reference point.
Cross-national/international/global qualification reference points	RQFs WRLs ISCED	This is the area in which the ACQF could potentially also play a role. RQFs, like the EQF and the ASEAN QRF, provide cross-border reference points, but these remain highly contextual and work is underway internationally to try and develop a more global set of reference points. In the case of the CEDEFOP study, the researchers used the EQF levels as a proxy.
Relationship between the qualifications and jobs and/or occupations	Occupational standards Educational standards Curriculum Assessment standards Learning programme	Skilled to semi-skilled Licensing, certification, registration and accreditation ESCO O*NET In the case of the CEDEFOP study, the researchers used the ESCO terminology as a proxy, specifically occupational specific skills and competences, and cross-sectoral and transversal skills and competences.

Source: Adapted from CEDEFOP (2016)

ESCO is the European multilingual classification of skills, competences, qualifications and occupations. ESCO works like a dictionary – describing, identifying and classifying professional occupations, skills and qualifications relevant for the European labour market and education and training. It is available in an [online portal](#) and can be consulted and downloaded free of charge. Its common reference terminology helps to make the European labour market more effective and integrated and enables the worlds of work and education/training to communicate more effectively with each other. ESCO is available in 27 languages, including Arabic, and composed of three pillars: occupations, skills/competences and qualifications. ESCO is linked to ISCO and the EQF.

Figure 2: Match of national qualifications profiles to ESCO (combining occupational-specific and transversal skills and competences)



Source: Bjørnåvold & Chakroun (2017)

At the time of the preparation of this report, ESCO provides descriptions of 2 942 occupations and 13 485 skills related with these occupations. The most recent improvement of ESCO took place in 2020, with the development and release of the new ESCO skills hierarchy. In 2020/21, ESCO is developing innovative technologies using artificial intelligence, allowing semi-automated linkage of qualifications' learning outcomes with ESCO skills for various uses, including comparison of qualifications. A first pilot project testing the approach was conducted in 2019 with five EU countries and the results were published early in 2020. The second pilot project was launched in June 2020 (with participation of the ACQF project) and results will be compiled and released in early 2021.

Attempting to compare qualifications across three criteria would be no simple task, and so the selection of qualifications from countries with NQFs simplifies the process. The further delineation of the cross-border criterion with the EQF as proxy, and the occupational purpose criterion with ESCO as a proxy, allows for a two-dimensional comparison that is more feasible. The methodology was applied in a further study on learning outcomes in twelve EU countries, five from Africa, two from Asia, one from the Gulf region, three from Latin America and the Caribbean and two Pacific countries (Bjørnåvold & Chakroun, 2017), which developed more detailed templates considering both horizontal (knowledge, skills and competencies) and vertical dimensions (taxonomies that specify complexity) of the learning outcomes contained in 77 qualifications (also see Dzelalija & Balkovic, 2014). The fact that these are all European choices does bias the process towards qualifications selected from Europe, but the methodology does provide an important example of how such a comparison can be done. A simple scale showing if the knowledge, skill or competencies are implicitly or explicitly covered in the qualification provides the basis for the qualifications profile in the form of a spider chart (see Figure 2).

While the approach remains subjective and is by no means an exact science, it provides a good foundation for future thinking and application as the global community continues to search for a common language for the recognition of learning. The Credentials Framework in the United States, and its Degree Qualifications Profile, will also be important to consider as this work continues in the context of the ACQF (Rein, 2016).

Example 2: Using an inventory approach to populate the NQF

A second example is from the analysis of vocational and higher education qualifications in the Moroccan context (ETF, 2016a, 2016b). While limited to one country, it allows comparison based on a common set of criteria. This analysis was purposefully circumscribed to qualifications in two strategic sectors (construction and automotive) and the approach is worth further consideration. The approach combines two interconnected elements: 1) an exhaustive inventory of all qualifications linked with the two sectors; and 2) an analysis of a sample of qualifications (of levels 4 and 6 of the NQF) looking at the degree of correspondence of their learning outcomes with the level descriptors of the targeted NQF levels.

The inventory structure consisted of the following:

- designation of certificate or diploma – including the specialisation;
- level and duration of training – corresponding to the NQF level descriptors;
- curriculum and year of development and/or formalisation – with a move away from content to learning outcomes;
- implementation framework – the institutional arrangement in which the training is implemented;

- provider – the training organisation;
- training facility;
- enrolees by training programme;
- skills jobs directory (referred to as the REM-REC) – the REM describes job activity, provides information on job-specific performance indicators, describes anticipated or identified changes, and the skills needed to perform them. Main activities represent the different work situations encountered in each job described in detail;
- legal references; and
- other sources of information (adapted from ETF, 2016a).

The Moroccan NQF level descriptors for level 6 are provided in Table 8.

Table 8: Morocco NQF level 6 descriptors

Descriptor	Criteria
Knowledge	In-depth theoretical knowledge applied at a high level, linked to an area of study or work and related areas.
Skills	Harnessing and using knowledge and skills as part of a training or employment activity (related to the field of study and connected areas). Manage complex technical or professional activities or projects. Mastering information and communications technologies. Contribute to supervised research.
Complexity	Analysing, synthesising and exploiting information from different sources. Develop arguments and master methods, techniques and tools to solve problems related to the field of activity.
Autonomy/ responsibility	Plan, direct, organise and evaluate the achievement of predefined results. Supervise and coordinate the work of several teams. Identify your own training needs and choose your study and/or professional background.
Adaptability	Adapt to strategic changes. Suggest, innovate and integrate changes in the company and implement them. Take responsibility for decision-making in unpredictable work or study settings.
Communication	Share information and ideas with specialists and non-specialists, in a clear and detailed way, giving advice with a good level in several languages.

Source: ETF (2016c)

The exercise of comparison sought to identify the degree of ‘fit’ of qualifications’ learning outcomes with the six domains of level descriptors of targeted NQF levels. The analysed cases showed that two of the six domains – autonomy/responsibility and adaptability – were less explicitly reflected in the learning outcomes of the qualifications source documents. The approach followed in the Moroccan case is not dissimilar to the Organising Framework for Occupations (OFO) used in South Africa and resembles some elements of the ESCO approach described in the first example. What does make it of interest is the strong reliance on the level descriptors of the Moroccan NQF. It also needs to be kept in mind that qualifications are not only vocational in their orientation and, as a result, regional and international higher and general education developments should be carefully considered.

Example 3: Comparing level descriptors

The value of comparing level descriptors is widely acknowledged internationally, but comes with a cautionary note:

The added value of national qualifications frameworks (NQFs) very much depends on their ability to specify levels of learning outcomes. ... The discussion on learning outcomes-based descriptors for qualifications frameworks cannot be treated as a purely technical issue. While conceptual and terminological clarity and consistency is of crucial importance, the role played by level descriptors depends on their ability to act as an agreed and credible reference point for all stakeholders in education and training, lifelong learning and the labour market (CEDEFOP, 2013, p. 5).

As the 2013 CEDEFOP working paper points out, the limitations of level descriptors lie in their capacity to be sufficiently detailed and multifaceted to capture the complexities of the NQF, to be sufficiently general to accommodate different parts of education and training systems and be able to reflect how knowledge, skills and competences increase in breadth, depth and complexity when moving from lower to higher levels. It is this need for a more scientific hierarchy, both vertically through the NQF/RQF levels and horizontally, through learning domains, where many level descriptors fall short or are not always explicit on how the levelling has been achieved.

The work done in the SADC context (Keevy et al., 2017), drawing on earlier UNESCO research (Keevy & Chakroun, 2015), and further interrogated by CEDEFOP (2018a), sets a basis for further development and is briefly summarised below. The approach used by SADC is premised on the utilisation of recognised taxonomies across the domains of knowledge, skills and competence. The three domains are clearly a limiting factor in the design, but provide a focus based on the common trends towards the use of these three domains in many NQFs and RQFs across the globe. It should also be noted that the use of an explicit skills domain is common across many frameworks, but increasingly the skills domain is being viewed as a sub-domain of competency. In this report, we have retained skills as a separate domain and conducted the analysis using the SOLO taxonomy (see below). There is, however, no reason not to further explore the application of both the SOLO and Dreyfus taxonomies to a broader interpretation of competency that includes skills. The taxonomies only act as filters through which the progression with the domains is made more explicit. An application that is decontextualised would produce weak results and would call for a more relevant tool to be utilised.

Table 9: Domains and sub-domains of level descriptors

Domain	Defined as	Sub-domain	Defined as
Knowledge	The ability to recall and present information	No explicit sub-domains are proposed	The existing categorisations and forms of knowledge can be accommodated in the broad domain as is the current practice; this decision could be reviewed at a later stage.
Skill	The ability to do in context	Foundation	Skills that emphasise literacy and numeracy.
		Transferable	The application of universal knowledge and skills across a range of social, work and geographical settings. This domain may at a later stage be further developed into a separate domain.
		Technical and vocational	The specific technical know-how to do a job.
Competence	The application of knowledge and skills in context	Applied competence	Includes foundational competence that focuses on intellectual/academic skills of knowledge; practical competence that focuses on the operational context; and reflexive competence that focuses on learner autonomy.
		Affective competence	Personal, behavioural and attitudes competences that include a specific focus on those competences that may be best assessed collectively.

Source: Keevy & Chakroun (2015); SADC TCCA (2017)

The approach is further limited by the use of the three existing taxonomies: Revised Bloom's Taxonomy for knowledge (Anderson et al., 2001); SOLO for skills (Biggs & Collis, 1982); and the Dreyfus Model of Skills Acquisition for competences (Lester, 2005). Here, the three taxonomies are not proposed as the only mechanism to determine hierarchies, but at least they are tried and tested approaches used in the education and training context for many decades. A brief summary of each taxonomy is provided below.

The Revised Bloom's Taxonomy is a hierarchical taxonomy with six major categories situated across two dimensions. The learning progression is from factual knowledge to metacognitive knowledge; and the cognitive process domain progresses from simple recall to more complex activities of understanding, applying, analysing, evaluating and creating.

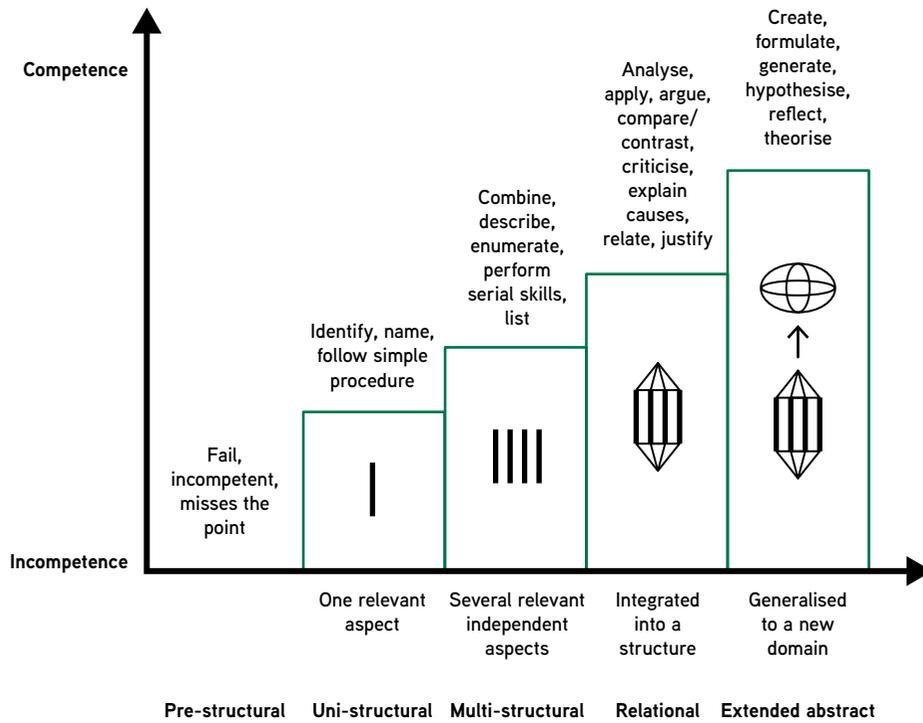
The SOLO taxonomy does not interpret the outcome as the end product of the learning process, but rather focuses on the 'underlying structures of thought that give rise to the product' (Keevy & Chakroun, 2015, p. 36). This focus makes SOLO relevant to the understanding and hierarchy of skills that are broadly considered as the ability to do. Progression within the SOLO taxonomy is based on levels of understanding ranging from uni-structural (one relevant aspect) to multi-structural (several relevant independent aspects), to relational (integration into a structure), and to extended abstraction (generalisation to a new domain).

Table 10: Revised Bloom’s Taxonomy

The knowledge dimension	The cognitive process dimension					
	Remember	Understand	Apply	Analyse	Evaluate	Create
Factual knowledge						
Conceptual knowledge						
Procedural knowledge						
Metacognitive knowledge						

Source: Anderson et al. (2001)

Figure 3: SOLO taxonomy



Source: Biggs (2014)

As in the case of the knowledge and skills domains, there is a widely used model for describing the competency domain, namely the Dreyfus Model of Skills Acquisition (Dreyfus & Dreyfus, 1986). The model differs from the Bloom's and SOLO taxonomies in that it focuses on the *acquisition* of skills through a hierarchy ranging from novice to expert.

Table 11: Dreyfus Model of Skills Acquisition

Level of progression	Descriptors
Novice	Rigid adherence to taught rules or plans Little situational perception No discretionary judgement Without reference to context
Advanced beginner	Guidelines for action based on attributes or aspects (aspects are global characteristics of situations recognisable only after some prior experience) Situational perception still limited All attributes and aspects are treated separately and given equal importance
Competent	Coping with crowdedness Now sees actions at least partially in terms of longer-term goals Conscious, deliberate planning Standardised and routinised procedures Analytical
Proficient	Sees situations holistically rather than in terms of aspects Sees what is most important in a situation Perceives deviations from the normal pattern Decision-making less laboured Uses maxims for guidance, whose meanings vary according to the situation Rational
Expert	No longer relies on rules, guidelines or maxims Intuitive grasp of situations based on deep tacit understanding Analytic approaches used only in novel situations or when problems occur Vision of what is possible

Source: Dreyfus & Dreyfus (1986)

In the case of the SADC RQF, level descriptors were reviewed through the lens of progression within the three learning domains – knowledge, skills and competence – as described above. A grid was then developed for each domain (two for the knowledge domain) and a smooth line was fitted to each of the grids. The SADC level descriptors were compared with other regional descriptors (the EQF and AQRf) and a selection of national descriptors (from South Africa, Botswana and Lesotho).

The SADC study (Keevy et al., 2017) found that although the knowledge domain is the domain that is the best understood, progression still varies across the frameworks. A common trend across several of the frameworks was the slow progression within the knowledge dimension and an overemphasis on procedural knowledge. Significant variations were also found across the different qualifications frameworks in progression in the skills domain. Overall, it was found that the level descriptors of the SADC RQF compared well with the descriptors used in the EQF and AQRf, as well as in the three NQFs included in the study.

As noted previously, the SADC example is certainly not fully developed, but it does provide a basis for further work in the area. CEDEFOP et al. (2017a, p. 36) note some dilemmas and challenges when comparing level descriptors, especially the need to balance international comparability and national relevance:

This publication shows that there is no single way of developing and defining level descriptors; the different approaches chosen at national level face different challenges. One group of countries has chosen to closely align national level descriptors to the EQF, emphasising international comparability as a key goal. This, however, runs the risk of limiting the national relevance and use of the descriptors. The EQF descriptors – deliberately using a general language – will not always be able to capture the complexities of a national qualifications system.

CEDEFOP further suggests a broadening of level descriptors to include transversal skills and competences. However, too many layers of level descriptors can reduce transparency, greater interaction between vertical and horizontal dimensions, alignment with qualifications standards, curricula and assessment specifications, and the need for a terminological convergence premised on transparent application. In Chapter 3, we provide a snapshot of the application of the methodology, by adapting a level descriptor analysis template used in SADC to a wider set of level descriptors.

Example 4: Referencing and alignment

The last example of a methodology used to improve harmonisation is referencing or, as preferred in the SADC RQF context, alignment. Referencing is a methodology used to compare qualifications frameworks and, by implication, the level descriptors associated with each framework.

In view of their geographic scope and status of implementation the three examples referred to here are the EQF, the AQRf and SADC Qualifications Framework (SADCQF).

The EQF was set up in 2008 and revised in 2017. In the context of the EQF, referencing is defined as

a process that results in the establishment of a relationship between the levels of the European meta-framework (EQF [European Qualifications Framework]) and the national qualifications framework (NQF) or system. Through this process, national authorities responsible for qualifications systems, in cooperation with stakeholders responsible for developing and using qualifications, define the correspondence between the national qualifications system and the eight levels of EQF (CEDEFOP, 2011b, p. 6).

Referencing is seen as a transparency process, based on criteria and procedures agreed for all concerned countries. The ten criteria and procedures for EQF referencing were developed and adopted by the EQF Advisory Group in 2009 and used for referencing the large majority of European NQFs to the EQF. In the 2017 revision of the EQF recommendations, the ten criteria and procedures were updated, fine-tuned and included as *Annex III*. The EQF portal contains a tool to visualise comparisons between NQFs, their levels and the qualifications types that are part of NQFs.

Both generations of the EQF Recommendation (European Commission, 2008, 2017) invite the involved countries to: 1) publish the referencing reports in the EQF portal upon their validation; and 2) use the appropriate EQF levels on newly issued qualifications documents and

qualifications registers, further to completion of the referencing process. At the moment of writing, 36 referencing reports accepted by the EQF Advisory Group are published on the website *Europass-EQF*. The 2017 EQF Recommendation aims to deepen and review referencing, and several countries have presented their revised referencing reports, reflecting the substantive evolution and reforms of NQFs. In 2020, France and Ireland are revising their referencing reports. CEDEFOP maintains a substantive knowledge base on NQFs in Europe, and annually monitors developments of NQFs (CEDEFOP 2018a, 2019, 2020).

Referencing criteria and procedures in the context of EQF share substantial similarities with SADC RQF alignment criteria and with the AQRf's own referencing criteria. In the context of the AQRf:

Referencing is a process that establishes the relationship between the eight levels on the AQRf and the levels on an NQF or NQS [national qualifications system] of individual AMS [ASEAN member states]. The objectives of the referencing process are: to describe a common structure for linking NQFs to the AQRf; to ensure that the linking process undertaken is robust and transparent; to provide a common reporting structure for the referencing reports. Referencing to the AQRf will improve the understanding of the levels of a NQF or NQS, and the qualifications that are situated on these levels, across participating AMS. To undertake referencing to the AQRf, AMS are required to submit an AQRf Referencing Report responding to the 11 AQRf Referencing Criteria for the AQRf Committee's consideration (ASEAN, 2018, p. 20).

In SADC, alignment is defined broadly as follows:

The vision is that, in the SADC region, all new qualification certificates, diplomas and other documents issued by competent authorities will show the relevant SADC [RQF] level. Alignment will enable this recognition of achievement at a regional level. The resulting transparency and information about the qualifications and QA of aligned Member States will further assist in embedding mutual trust amongst SADC Members. Regional alignment would also enable institutions and individuals to make comparisons of their learning and competence levels and would reduce unnecessary duplication of learning and effort when moving through SADC for study or work purposes (SAQA, 2020, p. 7).

The alignment plan of NQFs to the SADC RQF consists of two phases: a pilot phase of countries and roll-out to the rest of SADC member states based on their readiness. A tool for self-assessment by national alignment teams has been disseminated and included in the formal workflow of alignment processes. The concept of this tool resulted from peer exchanges with the ETF in 2016. Peer learning and capacity building workshops have been undertaken to assist the countries with the process. Eight countries (Botswana, Eswatini, Lesotho, Mauritius, Namibia, Seychelles, South Africa and Zambia) agreed to be part of the pilot phase of alignment of their NQFs to the SADC RQF in 2017. Angola, Democratic Republic of Congo and Zimbabwe joined in 2019. As of June 2020, two member states, namely Seychelles (Seychelles Qualifications Authority, 2020) and South Africa (SAQA, 2020), have completed the alignment of their NQFs to the SADC RQF, while the others are at various stages of aligning their NQFs to the SADC QF. Mauritius developed a draft alignment report (Mauritius Qualifications Authority, 2020). The reports have been published on the respective national websites.

Table 12: SADC alignment criteria

Alignment criteria	
1	Responsibilities of relevant national bodies involved in the alignment process are determined and published by the relevant competent authorities.
2	There is a clear and demonstrable link between qualification levels in the NQF/National Qualification System (NQS) and level descriptors of the SADC RQF.
3	The NQF/NQS is based on learning outcomes and links to non-formal and informal learning and credit systems (where these exist).
4	Procedures for including qualifications in the NQF or describing the place of qualifications in the NQS are transparent.
5	The National Quality Assurance System for education and training refers to the NQF or NQS and is consistent with quality assurance guidelines of the SADC RQF.
6	There is a clear indication of the relevant national authorities responsible for the verification of the qualifications obtained in the national system.
7	The alignment process shall include a stated agreement of relevant quality assurance bodies.
8	Competent national bodies shall certify the alignment of the NQF/NQS with the SADC RQF. A comprehensive report on alignment and its evidence must be published by competent national bodies.
9	The official platform of the SADC RQF must maintain a public listing of member countries that have completed the alignment process.
10	In the SADC region, all new qualification certificates, diplomas and other documents issued by competent authorities must contain the relevant SADC RQF level.

Source: SADC (2018)

The referencing of national and regional qualification frameworks represents a critically important point in the development of a qualifications framework (see Hart, 2009), as it entails the practical application of models that up to that point may have remained abstract and amorphous. It is at this point that the strengths and weaknesses of a framework become more obvious; it is also the stage at which the development of trust between countries and regions is solidified. For this reason, referencing should be understood as going beyond a simple technical exercise of matching levels, credits and qualification types; it is, rather, a social process in which different stakeholders are able to participate and that allows for the objective and external scrutiny of national systems that in the past may have been closely guarded and protected by each country.

Table 13: Dimensions of referencing

		Upward	Peer	Downward
Level	Primary	TYPE A1 Most common form of referencing to date; used in relation to the EQF	TYPE B1 New area being explored by New Zealand and China	TYPE C1 Necessary if the sub-framework preceded the NQF or if the two developed separately
	Secondary	TYPE A2 As the EQF is a meta-framework without its 'own' qualifications this is not possible	TYPE B2 There are several examples of mapping of specific qualifications between countries (even preceding the advent of NQFs)	TYPE C2 In this case the NQF will not have its 'own' qualifications as these are located within the sub-framework

Source: Adapted from Keevy & Jaftha (2014)

There are three types of referencing: 1) 'upward referencing', referring to countries referencing their NQF to the RQF; 2) 'peer referencing', where countries reference their frameworks with each other; and 3) 'downward referencing', which is the referencing of a more comprehensive qualifications framework with a less comprehensive qualifications framework – for example, referencing the NQF to a TVET qualifications framework (Keevy & Jaftha, 2014).

Referencing may appear to be a straightforward process, entailing comparisons and the establishment of a demonstrable link between qualifications frameworks based on agreed referencing/alignment criteria (see more details on referencing/alignment criteria in section 2.4.2, example 4), but requires analysis to demonstrate compatibility between NQFs and an RQF in a context of inherent diversity in qualifications systems and referencing experiences. In the EQF experience, comparing frameworks that have a varying number of levels has not been problematic, as seen by the cases of Ireland and Slovenia, for example. Improved understanding of the use of learning outcomes and the domains of learning used in level descriptors offers another important avenue to deepen referencing processes between countries and also between RQFs and NQFs – and this has been done throughout the experience of the EQF and AQR.

2.4.3 Towards a consolidated methodology for the transparency and comparability of qualifications in Africa

The interplay between the four approaches presented above provides a strong basis for a more robust methodology that can be further developed and employed during the ACQF process. Some considerations are briefly outlined below, and then applied in a limited manner in Chapter 3. Table 14 draws on the key strengths from each of the four approaches and includes suggestions for further analysis beyond what could be accomplished in this mapping study.

Table 14: Harmonisation options in Africa

	Reference point		
	National	African	International
Qualifications profiles	Use agreed criteria (see below) to select a sample of qualifications from African countries that can be matched to ESCO and presented as qualifications profiles. In the medium to long term it is proposed that classification of professional occupations, skills and qualifications relevant for the African labour market and education and training is developed.* (a)		
Inventory	This methodology is well suited to countries aspiring to set up NQFs and should be continued on the national levels where relevant. Examples from Morocco and South Africa will prove useful in this regard.	Not recommended at this point due to the variations across countries in terms of NQF development, but also with regard to the deeply entrenched system differences across English-, French-, Portuguese- and Arabic-speaking countries.	A comparison with other national inventories will prove useful.
Comparison of level descriptors	Use the SADC example to expand the application of the methodology to the 10 country case studies included in the ACQF mapping study. This exercise can form the basis for the development of a set of ACQF descriptors should these be agreed to in Phase 2 or 3 of the ACQF process. (b)		Benchmarking with other countries and regions is recommended during the development of level descriptors.
Referencing and alignment of NQFs to RQFs	The alignment process in SADC provides a useful example to other regions and should be further developed in ECOWAS and the EAC. Other RECs could follow when they are ready.	Careful consideration should be given to the future purpose of the ACQF and, by implication, the alignment of NQFs and RQFs in Africa to the ACQF, and then also the alignment between the ACQF and other RQFs.	

Note: *The utilisation of the nascent World Reference Levels (Hart & Chakroun, 2019) to develop similar qualifications profiles is discussed in Chapter 4, where some initial applications are summarised, including for level descriptors and the potential implication of this more neutral international metric for referencing and alignment of NQFs and RQFs.

In Chapter 3 we discuss the proposed application of (a) and (b) in Table 14 above. The selection of qualifications for analysis was carefully planned in consultation with the ACQF project, and the following key considerations informed the selection.

Consideration 1: Cover at least TVET and higher education

Considering that the analysis was limited in scope, the decision was made to not analyse school-leaving qualifications, as several regional initiatives have already been undertaken. School-leaving qualifications are also fewer in number, and mostly of a longstanding nature, with strong emphasis on curriculum aspects. On the other hand, TVET and higher education are two sectors that in most countries have been impacted by NQFs and learning outcomes approaches more directly and provide, in our view, important contemporary examples of how qualifications in Africa are being developed.

Consideration 2: Looking to the future

As the ACQF is being developed, we see an important international trend towards new forms of credentialing and digitisation (Shiohira & Dale-Jones, 2019). Taking into account the vision for the ACQF, as a framework open to innovation (technological, new types of learning and qualifications), the mapping study includes in the comparison of qualifications, an example of a digital credential.

Consideration 3: Qualifications must be relevant to employment in many countries

The selection of qualifications in TVET and higher education should be aligned to employment considerations between countries, in a region, or even across the continent. Cross-border mobility of jobs may be a good proxy for cross-border recognition of learning (see ILO, 2020c), but this will be tested in the analysis.

Consideration 4: Consider the impact and importance of the African Continental Free Trade Area and the Protocol on Free Movement of Persons, Right of Residence and Right of Establishment (AU Free Movement Protocol)

The Agreement Establishing the African Continental Free Trade Area (AfCFTA) was signed on 21 March 2018, and entered its operational phase in 2019 (AUC, 2019b). The objectives set by the AfCFTA are to create a liberalised market for goods and services, contribute to movement of capital and natural persons and facilitate investments, laying the foundations for the establishment of the Continental Customs Union at a later stage. One of the protocols of the AfCFTA (Protocol on Trade in Services) mentions in its article 10 ('Mutual Recognition') recognition of education and harmonisation. The Protocol on Trade in Services entered implementation with an emphasis on a number of priority sectors: business services, financial services, communication, tourism and transport. One of the main features of the AU Free Movement Protocol is that citizens should be made aware of the benefits of coexistence and integration, making it clear that the fear of foreigners taking economic opportunities is misplaced as they actually increase competitiveness, especially in skills enhancement. Countries are encouraged to reflect on how they can balance free movement of persons with protectionism. They are also advised to put in place policies that encourage mobility for skills acquisition, education and training. The AU Free Movement Protocol, in its article 18(2), stipulates that state parties should establish a continental qualifications framework to promote the free movement of persons. Comparability of qualifications in this context of economic integration and free movement is an imperative to which the ACQF can contribute.

Consideration 5: Selection of deep dive countries and RECs

The fact that the overall mapping study included deep dive visits to ten countries and three RECs meant that additional information could be sourced while in the individual countries.

Based on the five considerations outlined, the following qualifications (and courses) were selected for analysis.

Table 15: Selection of qualifications for further analysis

Illustrative qualification	Consideration					
	1. TVET and higher education	2. Relevant to employment	3. Looking to the future	4. AfCFTA and FTA	5. Links to deep dives	6. Used in other studies
Hotel assistant (tourism sector, certificate or diploma level, offered by college or employer)	TVET	Yes		Yes		CEDEFOP (2016)
Accountant (financial services sector, first degree level, offered by tertiary institution)	Higher education	Yes		Yes		
Coding course (ICT sector, non-formal level, offered by online provider)	TVET & higher education	Yes	Yes	Yes		

Considering the sheer volume of the task of a continental framework in comparing qualifications and level descriptors across different countries, systems and languages, it is useful to consider the extent to which such a process can be automated. The building blocks of a computer-based methodology for comparing qualifications are contained in the summary presented here and can certainly be automated with relative ease in the coming months. The development of the WRLs, including an automated application, is something to keep in mind and is further explored in Chapter 4.

2.5 Overview

In his seminal work on NQFs, Tuck (2007) describes an RQF as a meta-framework that consolidates and coordinates the NQFs that fall under its umbrella and, ironically, contains no qualifications. The EQF (European Commission, 2017) and AQR (ASEAN, 2018) certainly fit this description, so too the emerging RQFs in SADC (SADC Technical Committee on Certification and Accreditation, 2018), ECOWAS (UNESCO, 2013), the EAC (EAC, 2018; EAC & UNESCO, 2019) and IGAD (IGAD, 2019). An example of a level beyond even an RQF is the WRLs (Hart & Chakroun, 2019), although it would be difficult to describe the WRLs as a type of qualifications framework. This is the predicament of the ACQF. Geographically it is a continental framework, with an understanding that this definition includes countries that are considered part of the continental crust – for example, Madagascar, Seychelles, Cape Verde, Sao Tome and Principe. Whether the ACQF acts as a meta common reference framework (beyond national or sub-regional frameworks) or will extend towards some commonality of quality assurance arrangements or of qualifications is yet to be seen. It is important to note in any discussions on the proposed ACQF that RQF arrangements are different to bilateral, trilateral or multilateral agreements that may exist between national qualifications agencies, professional bodies and education providers for qualifications standards and recognition (Bateman & Coles, 2013). RQFs do not replace or undermine these agreements, but should support and enhance them.

Looking to the future, we see a continued emphasis on qualifications framework development, but there are important signs on the horizon that suggest that qualifications frameworks may lack the agility required in the digital post-Covid-19 era. A critical feature of this new period is also a shift to the individual who can own his/her own data, his/her own learning pathway, and is protected in this process (Shiohira & Dale-Jones, 2019). An important question, to which we will return, is the extent to which the ACQF would be able to leapfrog current thinking, unlink itself from the current trajectory of fourth-generation qualifications frameworks and still be uniquely African. This will be no small feat to achieve.

In the next chapter, we provide a detailed summary of the findings of the mapping study as we draw on the findings from the survey, desktop research and the field visits. The findings are presented in line with the eleven thematic areas described in Chapters 1 and 2.



3

MAPPING QUALIFICATIONS FRAMEWORKS IN AFRICA

Key points

- › This is a core chapter of the report. It builds on the thirteen country and three regional reports elaborated by the experts of JET Education Services and the ETF.
- › African countries' policies and experiences provide a rich framework in which improved harmonisation, seen from the angle of increased transparency and comparability, of qualifications can take place in a context where qualifications frameworks are at different stages of development and implementation across the continent.
- › The majority of qualifications frameworks in Africa are operational in countries of the southern African region, where the Southern African Development Community (SADC) Regional Qualifications Framework (RQF) is well established. These southern African National Qualifications Frameworks (NQFs) have been implemented for a longer period and, as a result, have more mature legal bases, operational instruments and governance structures maintaining and assuring integrity of the NQFs.
- › Recent developments in East Africa, notably in Kenya, since 2014, are noteworthy, with the establishment of the legal base, governance and register of qualifications. Ethiopia designed the technical-conceptual bases of its NQF, but the governance entity is not yet in place to drive implementation. Somalia engaged in the development of its NQF and initial draft conceptual documents were shared with the African Continental Qualifications Framework (ACQF) project in October 2020.
- › In the north, Morocco and Tunisia have had legally established NQFs for some time and continue working on implementation structures and registers of qualifications. Egypt has developed the key elements of an NQF for reform, to bridge gaps and build trust, but legislation is in the approval process.
- › In West Africa, there exists a more diverse panorama of qualifications frameworks: some countries have established qualifications systems, but no comprehensive NQF yet, while others have implemented Technical and Vocational Education and Training (TVET) frameworks and are developing comprehensive NQFs encompassing higher education. Some West African countries have initiated early stages of their NQF development processes, while others have moved to consultation of their draft NQFs (Angola, Ghana, Guinea-Bissau and Sierra Leone). Cape Verde is the notable example of an integrated and comprehensive NQF (eight levels), linked with the national catalogue of qualifications (online) and the system of recognition of non-formal and informal learning. After a decade of experience, the Cape Verde NQF was reviewed in 2020 and entered the stage of advanced implementation.
- › In Central Africa, Cameroon has been implementing the Licence Master Doctorat (LMD) framework in higher education since 2007, and a system of qualifications levels and types for TVET. Development of the NQF is part of the objectives defined in Cameroon's 'Document of Strategy of the Sector of Education and Training 2013–2020' and work has started with the establishment of a national working group and engagement with international expertise. NQF developments are least pronounced in this central part of Africa.

3.1 Introduction

This chapter summarises the findings of the mapping study, drawing on the eleven thematic areas and the methodological considerations presented in Chapter 2. The chapter starts with a snapshot of eleven countries and three Regional Economic Communities (RECs) that were included in the technical field visits, followed by a more detailed presentation of the mapping findings across the thematic areas. The country findings are presented first, followed by a more focused description on the regional aspects. This is followed by the analysis of a sample of level descriptors from the African countries and two RECs, using the methodology first attempted in the SADC context (Keevy et al., 2017). The last part of this chapter presents the findings from the analysis of a sample of African qualifications, drawing on the methodologies used by the European Centre for the Development of Vocational Training (CEDEFOP) (Bjørnåvold & Chakroun, 2017) in developing qualifications profiles against the European Skills, Competences, Qualifications and Occupations (ESCO) criteria of the most relevant occupations.

3.2 Snapshots of findings from case studies

3.2.1 Angola

The National Development Plan 2018–2022 of Angola details the development of a National Qualifications System (SNQ), of which the NQF will be a component. Development of the integrated and multifaceted SNQ is underway, underpinned by the SNQ roadmap 2019–22, supported by technical assistance and state budget, and led by a specific national coordination unit. Progress is tangible as the draft NQF concept paper is expected to be completed by the end of 2020. The NQF will be a key facet and tool of the SNQ, working together with a National Qualifications Catalogue (Register), Guidelines for Validation of Non-formal and Informal Learning, Integrated Information System, and a Manual for Development of Standards (of competence and training). The establishment of a National Qualifications Authority is planned for 2022. The Unidade Técnica de Gestão do Plano Nacional de Formação de Quadros (UTG-PNFQ) is responsible for the implementation of the SNQ development programme, as detailed in the National Development Plan 2018–2022. The initial discussion of whether the NQF should consist of eight or ten levels has moved to a new phase, and the ten-level structure has solid arguments in its favour, as Angola aspires to align to the SADC RQF. Level descriptors are in the discussion phase.

As part of the development of the SNQ, there is a move towards a renewed curriculum and a detailed qualifications development methodology, both based on learning outcomes. Angola is committed to participating in the SADC framework, thus enabling mutual recognition of qualifications and portability of skills and qualifications of migrant workers. In July 2020, the institute in charge of quality assurance of higher education and recognition and homologation of diplomas, INAAREES (Instituto Nacional de Avaliação Acreditação e Reconhecimento de Estudos do Ensino Superior), established a new online procedure for homologation and recognition of diplomas via the Portal of Public Services of the Government. This move to a dematerialised procedure responds both to Covid-19 constraints and to efficiency needs triggered by growing demand. The newly approved Law 32/20 of 12 August 2020, amending Law 17/16 on the Bases of Education and Training System, for the first time mentions the SNQ, defined as the guarantor of the articulation between the different sub-systems of education and the national system of professional training.

3.2.2 Cape Verde

The Cape Verde NQF is a pillar of the SNQ and has been in operation for the last ten years. The SNQ is further operationalised by a number of other instruments, including the National Catalogue of Qualifications (CNQ), the credit system, the individual register of qualifications and competences, the system of monitoring, evaluation and quality improvement of the SNQ, and the system of Recognition, Validation and Certification of Competences (RVCC). A number of legal Acts, some established as early as 2010, provide the legal basis for the SNQ, the NQF, the CNQ, the RVCC and the SNQ coordination unit and multi-stakeholder governance. In 2018 and 2020, the legal basis was reviewed and completed. The objectives of the NQF include readability, transparency, and comparability of qualifications, integration and articulation of qualifications from the various sub-systems, improvement of transparency of qualifications, promotion of access, evaluation and quality of qualifications, application of the learning outcomes approach to describe qualifications and promote validation of non-formal and informal learning.

The Cape Verde NQF aspires to compare with the European Qualifications Framework (EQF) and cooperate with the Economic Community of West African States (ECOWAS) qualifications area. The learning outcomes approach is a central principle of the NQF and assures a systemic link with the RVCC. The NQF consists of eight levels and the level descriptors combine three domains of learning: knowledge, skills, and responsibility and autonomy. The credit system of higher education is aligned with the European Credit Transfer System (ECTS). In TVET, a credit system is in development. The online CNQ registered 63 qualifications of levels 2 to 5 distributed in 15 sectors. The updated register of accredited programmes in higher education is managed by the Higher Education Regulatory Agency and the summary list is published at *Training Offers ARES*. Currently, this register includes 205 accredited programmes of NQF levels 6, 7 and 8 (licenciatura, master and doctorate). The websites of each Higher Education Institution (HEI) display information of the respective study cycles and qualifications. The Coordination Unit of the National Qualifications System (UC-SNQ) plays a leading role in implementing and coordinating the NQF and also provides technical support, especially in the development of policies and instruments. Most of the funding for SNQ-related activities stems from the state budget, but is also supported by other sources. The Agência Reguladora do Ensino Superior (ARES) is the regulatory agency of higher education in charge of quality assuring programmes and institutions and of the register of accredited programmes and qualifications.

3.2.3 Cameroon

Cameroon started reflection and analysis towards developing an NQF in 2017, according to the objective defined in the second strand (Quality and Relevance) of the Document of Strategy of the Education and Training Sector 2013–2020 (DSETS). The sector of vocational training and its lead ministry – the Ministry of Employment and Vocational Training (MINEFOP) – has been closely associated with these starting debates and proposals. In 2020, the country took new steps and secured resources to engage in the process of development of the NQF, by successfully concluding the appraisal of the large-scale project *Secondary Education and Skills Development*, funded by the World Bank Group. Sub-component 2.3 of the project will focus on strengthening the institutional capacity of the skills development system, including development of the National Qualification and Certification framework (NQCF), building on preliminary work done by MINEFOP in 2017 and the inter-ministerial working group already in place. The NQF will:

- a) specify the relationship – horizontal and vertical – between different qualifications within a

national system; b) cover all levels and types of technical education and training; and c) provide a way to compare qualifications and to describe the relationship between the different levels of a national technical educational and training system and the level, workload and learning outcomes of specific qualifications. The development and future implementation of the NQF has the potential to contribute to much-needed closer cooperation of the involved ministries. The authorities and stakeholders acknowledge the importance of an NQF to improve the integration, convergence and pathways for mobility between the different sub-sectors of the complex structure of education and training.

3.2.4 Egypt

The development of the NQF of Egypt began in 2005 and is ongoing. The establishment of the NQF is based upon an amendment of Law 82 of 2006, through which the National Authority for Quality Assurance and Accreditation in Education (NAQAEE) was also established. This body is responsible for the development and implementation of the NQF. When the NQF is fully operational, the following instruments will complement the framework: a credit system, level descriptors, articulation pathways, a national register of qualifications, and a system for the recognising of prior learning (formal and informal learning) and transfer of credits. The NQF will be comprehensive, including basic education, TVET and higher education and consisting of eight levels. The objectives of the NQF include setting and guiding reference and academic standards, linking different components of the education system so as to allow for smooth progression and mobility, while also fostering Recognition of Prior Learning (RPL) and acting as a comparability tool for the recognition of Egyptian qualifications. The NQF is seen as a reform instrument to bridge gaps, build trust, encourage lifelong learning and overcome social inequity.

3.2.5 Ethiopia

The Ethiopian NQF has been in development since 2006 and aims to be comprehensive, covering all sectors and including all national qualifications. The NQF was formally proclaimed in 2010, but it is unclear whether legislation has been enacted since the proclamation. Although originally envisaged to include ten levels, the NQF was amended to eight levels. The National TVET Qualifications Framework (NTQF) is a sub-framework that has been operational since 2010. The level descriptors in this sub-framework are a useful basis for future developments and have been developed across five vertical levels and four horizontal domains. Quality assurance practices within the NQF still need to be developed further. There is a strong emphasis on the non-formal in the Ethiopian Education Development Roadmap (2018–2030), which suggests the establishment of a separate national and regional agency to organise adult and non-formal education and non-formal TVET in the country.

3.2.6 Kenya

The Kenya National Qualifications Authority (KNQA) is the custodian of the country's NQF, having developed and gazetted the Kenya NQF Regulations. The Kenyan NQF is a learning outcome-based qualifications framework, encompassing all sectors and forms of learning, while acknowledging two separate sub-frameworks within this overarching framework, one for academic and the other for vocational qualifications. The framework consists of ten levels, with level descriptors spanning across three domains of learning: knowledge, skills and competence. A central register of qualifications managed by the KNQA sets out clear criteria for the

achievement of awards, detailing the knowledge and skills required in each case and the Kenya National Learner Record Database (KNLRD) is being established. The set of registers and systems for management of the KNQF is organised in the National Qualifications Management Information System (NAQMIS), which is in advanced development stage. The KNQA is also in the process of developing occupational and training standards, so that qualifications can be better aligned to industry and employer needs.

3.2.7 Morocco

In 2007, Moroccan stakeholders and governmental institutions initiated the process of analysis and exploration underpinning the technical and conceptual design of the NQF. The NQF conceptual-technical framework was originally validated by a ministerial conference held in Rabat in 2013. In October 2015, the document was updated and revised, and in 2019 it was revalidated by the Minister of National Education. The Moroccan NQF is underpinned by a range of policy and legislative documents, such as the Framework Law 51.17 on Education (adopted 19 August 2019), the Strategic Vision 2030 for a School of Equity Quality and Promotion and the Professional Training Strategy 2021. An important step was taken with the creation of the NQF Permanent Commission in July 2019. The Moroccan NQF is comprehensive and structured in eight levels, each defined by six domains of level descriptors: knowledge, skills, complexity, autonomy/responsibility, adaptability and communication. The level descriptors in the Moroccan NQF are formulated with detail and can serve as a reference for stakeholders and practitioners involved in designing competence standards, learning programmes and assessment standards. The learning outcomes-based qualifications are well rooted in the professional training sub-system. In Morocco, the competences-based approach *Approche par Compétences* (APC) has been continuously promoted by the government and gathered substantial experience of more than a decade of methodological developments, programme design and implementation and training of APC specialists. In the medium term, Morocco aspires to reference its NQF to the EQF. At the same time, the highest country leadership has expressed commitment to join and contribute to the activities of the ACQF development process and to work for common objectives on qualifications in the continent.

3.2.8 Mozambique

Currently Mozambique has two sectoral qualifications frameworks in implementation, the Qualifications Framework for Higher Education (QUANQES, adopted by decree in 2010) and the National Professional Qualifications Framework (QNQP, adopted by law in 2016). The QNQP seeks to improve parity of esteem, by providing a framework for equivalence between professional and general qualifications. The proposal of the new unified/comprehensive NQF is in an advanced stage of development, in consultation with all sub-systems and relevant institutions. This process is incremental, as it builds on the experience and instruments of the existing sub-frameworks. It is expected that adoption of the relevant legal Act will take place in 2020. The integrated NQF will work further with the existing sub-frameworks, governed by a national qualifications agency involving all relevant bodies, and manage a new comprehensive national catalogue of qualifications. QUANQES operates in close articulation with the National System of Evaluation, Accreditation and Quality Assurance (SINAQES). The final consensus on the common and integrated architecture of the proposed unified NQF is expected towards the second semester 2020.

3.2.9 Senegal

Senegal has two sub-system qualifications frameworks – the higher education qualifications framework (LMD) and the National Vocational Qualifications Framework (NVQF). The country does not have a single unified NQF as yet and it has been noted that in order to develop a comprehensive framework, a shared vision has to be agreed upon. Furthermore, the participation of the social partners in consultation and decision processes about qualifications has to be strengthened. The Programme for Improving Quality, Equity and Transparency (PAQUET – Education-Training Sector 2013–2025) is paving the way for an education and training ecosystem in which qualifications are regarded as key in order to meet development goals, as well as private sector demand. The NVQF consists of qualifications at five levels, of which the first four are governed by the ministry in charge of TVET, and the fifth level by the Ministry of Higher Education. The length of the various programmes at the different levels and their subdivisions are fixed by law. While level descriptors are not based on learning outcomes, Law 2004-37 (2004) takes into account the demonstration of theoretical knowledge and technical skills, as well as the requirements of the labour market. The Directorate of Examinations, Professional Competitions and Certifications and the Directorate of Vocational and Technical Training are both responsible for the implementation of the NVQF in Senegal. Quality assurance is the responsibility of the National Quality Assurance Authority for Higher Education.

3.2.10 South Africa

The South African Qualifications Authority Act of 1995 tasked the South African Qualifications Authority (SAQA) with the development and implementation of the NQF for South Africa. The Act was repealed in 2008, and the new legislation introduced innovative changes to the South African NQF. The NQF is comprehensive, consisting of ten levels and spanning basic education, TVET, trades and occupations and higher education. Access, redress, articulation and progression, quality and transparency within and across all spheres of education, training and development, as well as the workplace, are some of the main purposes of the South African NQF. Three sub-frameworks exist within the overarching NQF and each of these is the responsibility of three Quality Councils (QCs). Umalusi is responsible for the General and Further Education and Training Qualifications Sub-Framework (GFETQSF), occupying levels 1 to 4 of the NQF. The Council on Higher Education (CHE) is responsible for the Higher Education Qualifications Sub-Framework (HEQSF) on NQF levels 5 to 10, and the Quality Council for Trades and Occupations (QCTO) is responsible for the Occupational Qualifications Sub-Framework (OQSF) occupying levels 1 to 8 of the South African NQF. These QCs are responsible for quality assurance as well as the development of standards within their respective sub-frameworks. The QCs also work with SAQA to achieve the overall objectives of the South African NQF.

3.2.11 Togo

The qualifications offered by the Ministry of Technical Education and Vocational Training (METFP) in Togo are split into two streams, vocational training and technical education. Qualification levels are determined on the basis of course duration, as well as the hierarchy of certificates, diplomas and degrees, and this protocol is followed by basic education, TVET and higher education. Reference is not made to learning outcomes, occupational positions or labour market demand when determining qualification levels. Four institutions are primarily responsible for vocational qualifications in Togo. The Directorate of Examinations, Competitions and

Certifications (DECC) organises and delivers most certificates for levels 1 to 4, under the supervision of the ministry in charge of TVET. The industrial and tertiary sectors and most informal artisans' trades are under this directorate. The Directorate of Secondary Technical Education is responsible for the coordination of technical education and training in lower and upper secondary education. The Directorate of Vocational Training and Apprenticeship is responsible for lower-level vocational training in formal, non-formal and informal sectors. The Training Centre for Industry Trades (CFMI) is responsible for transmitting all the necessary knowledge and skills related to the fields of industrial professions. Currently, Togo does not have a dedicated quality assurance framework, although the Conseil Africain et Malgache pour l'Enseignement Supérieur (CAMES) provides some support. The Public-Private Partnership Charter being promoted by the government of Togo encourages the signing of agreements between training institutions and private enterprises. These agreements aim to address key issues concerning training adequacy and employment, particularly with regard to internships, working conditions in enterprises for the implementation of work-linked training and the equipping of institutions. The National Strategy for Technical Education and Vocational Training (SNETFP) attempts to promote the attractiveness and visibility of the TVET system. Of particular importance would be the development and implementation of an NVQF to integrate the recognition and validation of prior learning and experience.

3.2.12 SADC

The SADCQF consists of ten levels and was established in 2011 and launched in 2017. Its purpose is to contribute towards easier movement of learners and workers, as well as promoting lifelong learning opportunities across the SADC region and internationally. The SADCQF consists of a set of principles that promote comparability; common understanding of qualifications credits; quality assurance; and mutual recognition of qualifications within the region and internationally. The level descriptors for each of the ten levels of the SADCQF are based on learning outcomes with three domains of knowledge, skills, autonomy and responsibility. It is an inclusive framework encompassing all forms, types, levels and categories of education and training, and supported by quality assurance guidelines. The SADCQF is currently being implemented in a number of member countries across the region through various programmes.

3.2.13 ECOWAS

In October 2012 the ECOWAS Ministers of Education approved the guidelines and roadmap for implementation of NQFs and RQFs in the region. At present, Nigeria, The Gambia, Ghana, Cape Verde and Senegal in the ECOWAS region have functional NQFs. Nigeria's NQF has six levels, with the highest being a doctorate; the Gambia has five levels, including a fundamental level; the NQF of Senegal has five levels (up to engineering level); the NQF of Cape Verde has eight levels (from basic education diploma to doctorate degree), and Ghana's national TVET qualifications framework has eight levels. It has been stated that a common approach has to be adopted for the development of qualifications in general, and NQFs and RQFs in particular, in order for harmonisation to take place. A number of policies are being developed, reviewed, or adopted by the REC, including the Framework for Recognition and Equivalence of Certificates in the ECOWAS Region and the ECOWAS Benchmarks for the Harmonisation of University Education. During the harmonisation process, it is expected that there will be trade-offs between the REC and member states because qualifications and their classifications are related to societal values

and occupational roles and respond to labour market demands both at national and regional levels. It is likely that the ECOWAS RQF will relate to current sub-regional and regional instruments like the West African Examinations Council (WAEC), the West African Economic and Monetary Union (WAEMU) and CAMES for their qualifications regulatory instruments and quality assurance initiatives (ILO, 2015).

3.2.14 EAC

The East African Qualifications Framework for Higher Education (EAQFHE) was the first RQF to be developed by the EAC and adopted by the ministers in April 2015. The framework consists of eight levels, from lower primary education to doctorate degree. All qualifications listed on the EAQFHE contain outcome statements, which describe the knowledge, skills and attributes of a graduate. The outcome statement is designed to be used by prospective employers and tertiary education organisations, and for comparing qualifications. The credit system of the RQF is based on one credit being equivalent to ten notional hours. The Inter-University Council for East Africa (IUCEA) is the custodian and governing body of the EAQFHE and is also responsible for monitoring. Quality assurance of qualifications in East Africa is done at different levels: at institutional level (universities, institutes of higher learning) and at national level through quality assurance authorities. The IUCEA works closely with these quality assurance institutions in order to carry out harmonisation. The EAC Common Higher Education Area was adopted in 2017, to reach comparable, compatible, coherent and harmonised systems of higher education, thereby facilitating mobility and mutual recognition of qualifications.

3.3 Mapping the NQFs in Africa

3.3.1 Introduction

The mapping study sought to find evidence to support the status of various dimensions related to qualifications framework developments underway in member states. The data is presented as a snapshot in time and will undoubtedly be updated by countries as the ACQF process continues. A detailed analytical framework was developed online and can also be updated going forward.

ACQF mapping study analytical framework	Description	https://bit.ly/ACQF-AnalyticalFramework
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The online framework matches the eleven thematic areas defined by the Terms of Reference and presented in Chapter 2 and is presented in summary format below. Examples across the thematic areas are drawn from the data sources that formed part of the mapping study – a desktop review, online survey (33 countries), field visits (thirteen countries and three RECs), as well as ongoing interactions with countries during the period, which included the completion of the data collection tool by five additional countries. Country and REC reports are referenced in their totality and the reader is encouraged to access these reports for specific references to country- and REC-specific sources and URLs. The late submissions from Chad, Republic of Congo, Ghana and Zimbabwe, with the survey instrument, have also been considered here, but could not be factored into the survey report, which had already been finalised.

3.3.2 Legal and policy bases for qualifications frameworks

As is the case with most policy instruments, qualifications framework development tends to follow a sequential process, starting with early discussion documents, and later more formal legal instruments, such as policy paper and reference documents, laws (and implementation texts), regulations, decrees and decisions. To support implementation, laws and decrees are naturally not sufficient: an adequate operational set-up, a body of methodological and technical instruments are indispensable, such as classifications/taxonomies, guidelines for qualifications development, procedures for registration of qualifications, involvement of sector councils and NQF handbooks for users. In certain countries, specific legislation is enacted to guide the management and quality assurance of databases and registers of qualifications. Learning from peer experiences helps, including international experience of NQF implementation, which has resulted in a large body of knowledge, toolkits and methodological support, accessible via online portals and resources. But the capacity to move from NQF concept papers to approved NQF legislation and further to NQF implementation instruments and effective governance is not always in place or sustained, resulting in many well-designed NQFs becoming simply legal Acts that have not been implemented.

While these processes vary in terms of duration and scope, countries begin with different entry points, depending on the level of strategic and policy priority given to the NQF, the availability of technical and expert assistance, and the capacity and commitment of national institutions. The ACQF mapping study identified a number of illustrative cases, worth mentioning.

Angola's NQF development is given high priority in the National Development Plan and the ongoing process follows an agreed roadmap for 2019 to 2022, supported by accountability milestones, which consist of all the key pillars of the new SNQ. The Angolan NQF is being conceptualised and designed as part of the SNQ and benefits from technical assistance and takes account of such reference points as the SADC RQF and also the 2014 reflections led by the Ministry of Education towards a ten-level qualifications framework for teachers. One of the remarkable features of the new phase of NQF development is the wide national discussion of concepts and terms, carried out with stakeholders through debates and workshops in many regions of the country with the purpose of raising awareness and building a common understanding of the NQF. Another noticeable feature is the transversal position of the organ leading and coordinating the roadmap for the SNQ, which is assured by a specialised entity of the UTG-PNFQ, operating under the umbrella of the Civil House of the President of the Republic of Angola – not by a ministry. The ongoing process shows the importance of constant dialogue for building trust between ministries and the UTG-PNFQ to design a shared NQF and SNQ, and to establish an autonomous National Qualifications Agency at completion of the SNQ roadmap.

The government of **Cameroon** committed to establishing an NQF in its Document of Education and Training Strategy 2013–2020. The process started in 2017 with initial analysis and setting up of an inter-ministerial working group and is being resumed in 2020–21. Planned technical assistance will contribute to developing the concept paper and instruments of the NQF. The ACQF mapping study found that the NQF idea was rooted in the strategy, but more effort would be required to amplify and disseminate it among relevant departments and stakeholders.

These are three examples of countries developing their first NQF experience. But there are countries further ahead in the process, which are revising their existing and already operational qualifications frameworks.

Morocco's NQF development process went through four main phases, which included awareness raising and reflection (2007–08); planning of key activities and diagnostic (2009–10); conceptualisation and design of the NQF (2011–12); experimentation and testing of the NQF structure and procedures for positioning of qualifications in the framework; and elaboration of the organisational proposal to run the NQF (2012–16). The process was participative, involving a steering committee composed of all key ministries and agencies with a stake in qualifications and the employers' confederation, the General Confederation of the Enterprises of Morocco (CGEM). Capacity development through study visits, workshops and peer learning with experienced NQF agencies was strengthened in the last phase. The July 2019 establishment of a new more representative Permanent Commission is seen as determining the NQF implementation phase. At this stage, it can be assumed that a revisited understanding of the specific role of the NQF in the underlying qualifications system and its interplay with the key sub-systems is certainly a defining element in this phase. With a wider stakeholder group involved in the Permanent Commission, renewed discussions on the NQF conceptual and technical design are likely to take place, reflecting new societal and economic demands and new expectations.

In **Mozambique**, almost a decade since enactment of the first qualifications framework (higher education) and four years since the launch of the framework of professional qualifications, the country decided to create an integrated comprehensive qualifications framework. This process is incremental, as it builds on the existing experience of the sub-frameworks, but it is also innovative. It proposes a new paradigm, as if the compartmentalised sections of education could finally be linked as a continuum of learning supported by the new NQF vision. While this new idea of the integrated NQF is consensually endorsed, putting it in place will not be disconnected from further discussion on what makes new types of qualifications and certificates eligible for the NQF, and how the umbrella NQF will ensure that the new continuum of learning becomes a reality for the people. Moving from compartmentalised operational qualifications frameworks to an integrative NQF is a different type of NQF development, promising ample space for policy and peer learning.

Other types of NQF-development processes can be sourced from the ACQF mapping study and a tentative typology of factors and conditions driving progress, stagnation, resumption, renewal or oblivion can be discussed with stakeholders in other phases of the ACQF project. This policy learning dialogue is important to shape the specific entry points of the ACQF.

RQFs tend to follow collaborative and dialogue routes based on the specific regional structures in which they are being developed. The level of specificity and extent of consultations generally follow a logical sequence, outlined in Figure 4.

Figure 5 provides a summary of the survey responses on this same topic and further illustrates that countries use legal instruments (laws and regulations) to establish NQFs. Considering the relatively high number of NQFs that are being developed, more discussion documents would have been expected as responses to this question in the survey. The low number may be attributed to a misunderstanding of the question, but the relatively low number of discussion documents and concept notes is of concern. Looking at the learnings from past experiences and the trajectory of many of the established NQFs, such preparatory documents form an important basis for legal instruments that follow at a later stage and mitigate the risks associated with such thinking and work being lost due to limited communication among the key actors in the country.

Figure 4: Legal and policy process followed to develop NQFs

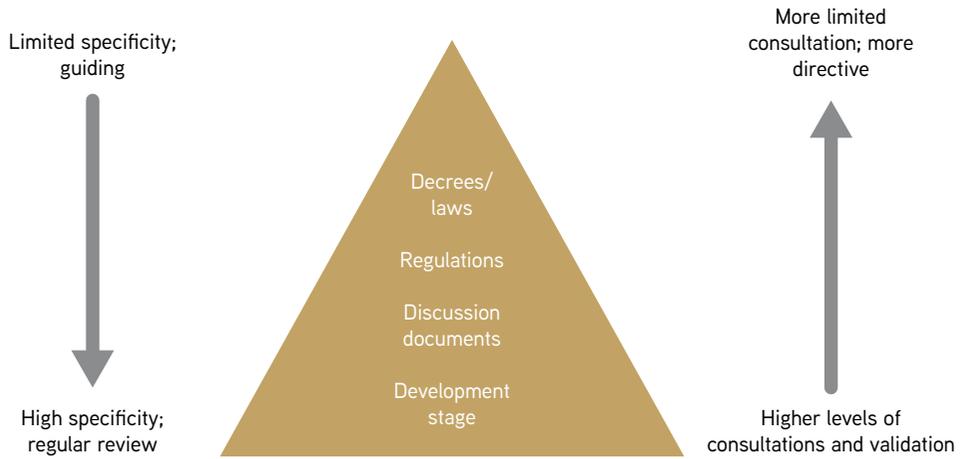
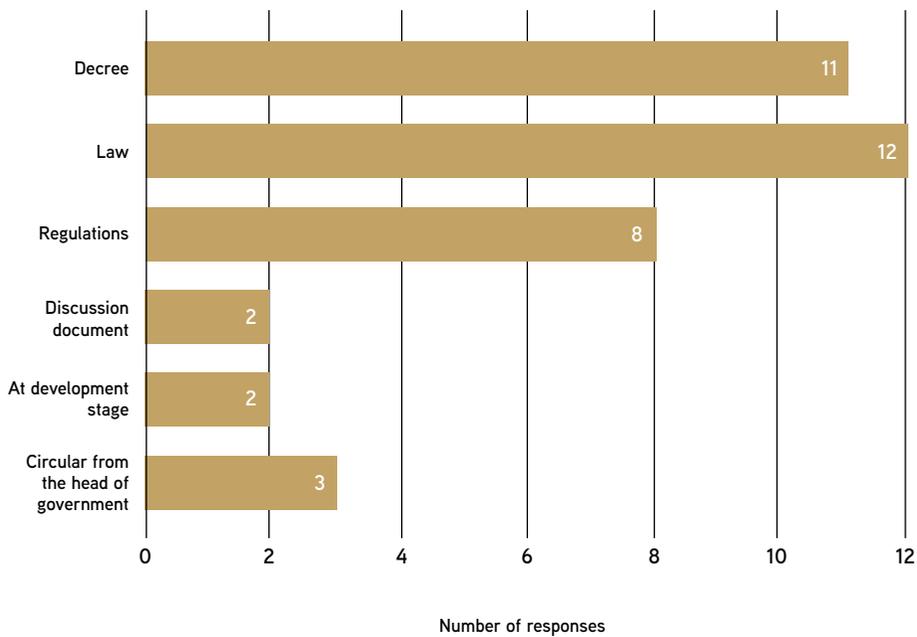


Figure 5: Legal basis of NQFs



Source: <https://bit.ly/ACQF-OnlineSurvey2019-20>

The scope and duration of the processes outlined above vary greatly. In the summary below (and summarised in Figure 6), we provide a brief account of how these have materialised among the countries and regions included in the mapping study. Many countries purport to be at the first developmental stage of NQF development. However, the availability of documentation to support this is extremely limited. An added factor is that some countries may not be fully conversant with the NQF terminologies, hence the varied interpretations. The ACQF mapping study itself hopes to contribute to understandings, which, in turn, should lead to more consistency in responses. To manage this process, the mapping study has defaulted to placing such countries in the category of 'no information at present'. It is of course anticipated that this information will be supplemented through the next phases of the ACQF process and be made available in the online versions of the ACQF inventory as well as the ACQF mapping study analytical framework.

Angola provides a useful example of a country where the NQF has become firmly entrenched in key national strategic documents, notably in the National Development Plan 2018–2022 of Angola. As noted in the Angolan country report, from 2019 to 2022, Angola is actively developing its SNQ. The UTG-PNFQ expects to complete the first draft of the concept paper on the NQF by the end of 2020. As defined by the National Development Plan (Programme 1.3.3) and planned in the implementation chronogram (roadmap), the SNQ is wider than an NQF, as it will consist of a set of operational instruments, a dedicated governance structure and a substantial legal and methodological basis. These key operational instruments of the SNQ will be an NQF, a National Qualifications Catalogue (register, database of qualifications), Guidelines for Validation of Non-Formal and Informal Learning, Integrated Information System and a Manual for Development of Standards (competence and training). The objectives of the NQF are articulated in the National Development Plan and include a strong focus on addressing the current compartmentalisation within the Angolan education and training system. The intention is for existing legislation defining the framework of quality assurance of higher education and new general curriculum standards for the courses of graduation in higher education to be closely correlated with the operationalisation of the Angolan NQF. In August 2020, Law 32/20 introduced modifications to the Law of Bases of Education (17/16), notably by extinguishing one of the higher education qualifications, the 'Bacharelato'. Most importantly, the new law for the first time mentions the National Qualifications System (article 19), defining it as the guarantor of the articulation between the levels and domains of learning outcomes from the different sub-systems of education and the National System of Professional Education.

In **Cape Verde** the NQF has been the object of extensive legislation, starting in 2009 and continuing to the present day. Legal instruments include: Law 65/2010, which regulates the nature, structure and effects of the NQF; Law 66/2010, which regulates the structure and development of the National Catalogue of Professional Qualifications (CNQP); and more recently, the Joint Portaria 9/2020 and 10/2020, which respectively established the structure and organisation of the NQF, and regulate the NQF. The vision and wider objectives of the SNQ and the NQF as expressed by the legislative texts enacted in 2010 and those of a decade later (2018 and 2020) are fundamentally analogous. But the new legislation enacted in 2018 and 2020 introduced several novelties, especially new instruments of the SNQ, and a revised and reinforced governance of the SNQ.

Egypt provides a slightly different example, where the regulatory and legal framework mandating the NQF and its implementation is embedded in the amendment to Law 82 of 2006, which established the NAQAAE. The Egyptian NQF does not have a separate or individual law, but it has the same level of legality through Law 82 of 2006.

In **Ethiopia**, through the Ethiopian NQF process, concept notes and draft policies were developed between 2008 and 2014. These included proposals for credit arrangements, assessment, quality assurance and others. The Ethiopian NQF was formally proclaimed in 2010, but from available information, there has been no further progress.

In **Kenya**, two major reform processes highlighted the need to coordinate and clarify Kenya's education and training system, and resulted in two main legal instruments that regulate the Kenyan NQF – the Kenya NQF Act (2014) and the Kenya NQF Regulations (2018). As in many other countries, TVET legislation predated the Kenyan NQF and established the Technical and Vocational Education and Training Authority (TVETA) in 2013 to assure quality in TVET, as well as a TVET Curriculum Development, Assessment and Certification Council (CDACC) to undertake the design and development of curricula for the training institutions; examination, assessment and competence certification; and the TVET Funding Board under Section 47 as a mechanism to provide funds to be used for financing technical and vocational training.

In **Mozambique**, the legal bases of the higher education qualifications framework (QUANQES, Decree 30/2010) and of the framework of professional qualifications (QNQP) are in place, and in both cases are articulated with the key mechanisms of the respective sub-systems: credit accumulation and transfer systems, and quality assurance. The draft decree underpinning the new integrated NQF is complete, but discussion continues on certain qualifications levels.

The **Moroccan** NQF is underpinned by a range of policy and legislative documents, such as the Framework Law 51.17 on Education (adopted 19 August 2019), the Strategic Vision 2030 for a School of Equity Quality and Promotion, and the Professional Training Strategy 2021. The Reference Document of the Moroccan NQF defines the detailed conceptual-technical design of the NQF and is politically validated, but is not sanctioned by a legal Act. By decision of the Minister of National Education (289/19), an inter-stakeholder organ – the NQF Permanent Commission – was established with the mandate to operationalise the NQF.

In **Senegal**, article 29 of the 2015 Act on Vocational and Technical Training Orientation stipulates that the ministry responsible for vocational and technical training organises exams, professional competitions and certifications. It delivers diplomas and professional titles through regulatory channels. The titles and diplomas awarded are listed, classified and published in compliance with the national classification system.

Similarly, in **South Africa**, the NQF is governed by a legislative Act passed by parliament and signed off by the president of the republic. The NQF Act 67 of 2008 replaced the SAQA Act of 1995. Amendments to the NQF Act of 2008 were enacted in August 2019. A number of policies have been developed by SAQA, together with the three quality councils, including for the implementation of recognition of prior learning, recognising a professional body and registering a professional designation and level descriptors for the NQF.

In **Togo**, article 12 of the 2002–16 Act stipulates that the Ministry of Technical Education and Vocational Training, in cooperation with the consular chambers, is responsible for the qualifications system. One of the certifiers and implementers of the national qualifications system is the DECC, which organises professional examinations and delivers diplomas, certificates and professional titles. A legal framework is being established as a foundation for a holistic NQF that goes beyond TVET. Prospects for cooperation and further development of the quality assurance legal and regulatory framework of higher education are encouraged with support of the Harmonisation of African Higher Education Quality Assurance and Accreditation (HAQAA) initiative.

In summary, the mapping study found that southern African member states, including the SADC RQF, have been implemented for a longer period and, as a result, have more mature legal and policy bases in place. More recent developments in East Africa, notably in Kenya and to some extent Ethiopia, are noteworthy, while in the north, Morocco and Egypt have made good progress. Some West African countries, notably Senegal and Togo, have established qualifications systems, such as the LMD system in higher education, but no comprehensive NQF yet. Cape Verde is a rare example in ECOWAS of a comprehensive NQF, governed by a specialised entity and operating the key instruments, such as an online national catalogue of qualifications, a system of RVCC and an extensive legal and methodological basis.

3.3.3 Governance of qualifications frameworks

The governance of qualifications frameworks is closely aligned to the legal and policy bases discussed in the previous section. For NQFs at earlier stages, the oversight role is mostly assigned to a ministry of education, labour or TVET, whereas for more advanced NQFs, qualifications or accreditation agencies are established under these ministries. In some cases, these bodies are national, and in other cases, they focus exclusively on sectors, such as higher education or TVET. Drawing on the sources of the mapping study, these primary NQF oversight bodies were broadly categorised as below, and used to delineate governance mechanisms in the analytical framework:

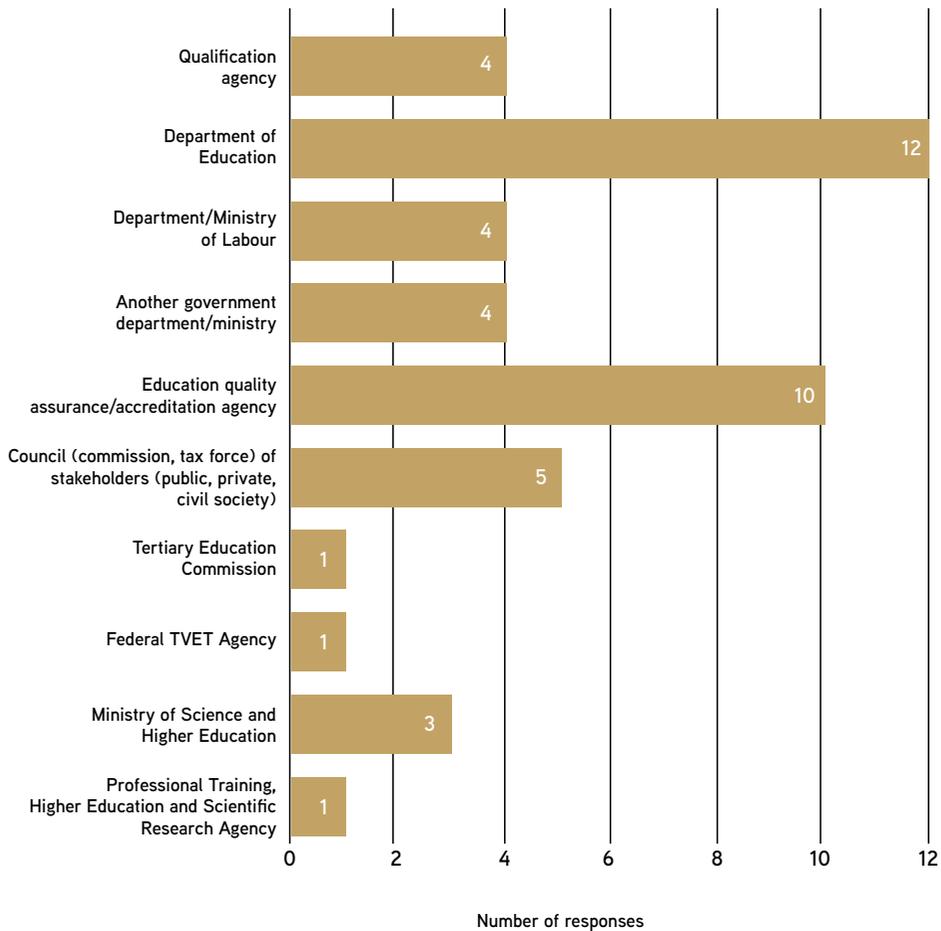
- › department or ministry of education, higher education, labour or other ministries;
- › national qualifications, quality assurance accreditation agencies;
- › higher education councils, quality assurance accreditation agencies, including tertiary education commissions;
- › TVET quality assurance accreditation agencies; and
- › professional and research agencies.

This list is not exclusive and some variations are found across member states. The roles of social partners and other stakeholders are important in these governance mechanisms, but are not always evident in the available sources. Indicators and mechanisms to support implementation and monitoring are also important to support good governance of NQFs. As illustrated in Figure 6, the online survey also found a huge variation in the types of the main NQF oversight bodies, with education ministries and qualifications/quality assurance agencies more prominent.

In **Angola**, the UTG-PNFQ was created by Presidential Decree 187/13 and operates under the umbrella of the Civil House of the President of the Republic of Angola. The UTG-PNFQ is also in charge of the implementation of the PNFQ and provides technical and expert support to the interministerial commission. The commission includes representatives of the Ministry of Education, the Ministry of Higher Education, Science and Technology and the Ministry of Public Administration, Labour and Social Security (in charge of a National System of Professional Training), the Ministry of Planning, the Ministry of Economy and the Ministry of Territorial Administration. The establishment of the new Angola National Qualifications Authority (ANQA), with the lead role over operations of the SNQ, is in preparation. Launch of the ANQA is expected in 2022. Other institutions involved in the implementation of the PNFQ, including SNQ activities, are the Instituto Nacional de Emprego e Formação Profissional (INEFOP), universities, technical education institutions, professional training centres and social partners.

Sectoral commissions are being established for the development of qualifications and professional pathways associated with the SNQ.

Figure 6: Responsible for overarching policy matters related to the NQF



Source: <https://bit.ly/ACQF-OnlineSurvey2019-20>

In **Cape Verde**, the governance of the NQF, in the frame of the SNQ, is assured by the UC-SNQ, established via Decree-Law 62/2009 in December 2009. A decade later, the UC-SNQ remained the core governing structure and its leading and coordinating role was reinforced (Decree-Law Nr 7/2018). The UC-SNQ is led by the unit coordinator and consists of: a) the Inter-ministerial Technical Committee for Qualifications (CTIQ); b) the Executive Secretariat; and c) the National Commission of Professional Equivalences (CNEP), a specialised body of the SNQ. The social partners contribute to the coordination of the SNQ through statutory participation in the CTIQ and CNEP. Other entities that integrate the governance and implementation of the SNQ include the Institute of Employment and Vocational Training (IEFP), sectoral technical committees and higher education institutions. The operated changes reinforce the role and action of the UC-SNQ

in integrating and aligning the offerings of education and training through the CNQ, harmonising the development of professional profiles and training modules, and working for efficient articulation of the sub-systems of education and convergence between academic and professional qualifications.

In **Egypt**, apart from mandating the NAQAAE to establish, implement and monitor the NQF, no further arrangements have been made at this early stage of implementation. Currently, there are no sector councils that are directly involved in the development of the NQF or anticipated to be involved in its implementation. However, industry and organised labour have made input to the development of the NQF through extensive involvement of stakeholders with whom the NAQAAE has consulted during the developmental stages.

In **Ethiopia**, a model of governance for the Ethiopian NQF, which is centrally coordinated and provides the broad parameters within which good practice could be achieved consistently across all sectors, was recommended in 2008. At present, the Higher Education Strategy Centre (HESC) is an autonomous body that has been the leading government agency overseeing the development of the Ethiopian NQF, while the Higher Education Relevance and Quality Agency (HERQA), a sister agency to HESC, is mandated by the Ministry of Education to conduct pre-accreditation and accreditation. HERQA also conducts quality audits and is involved in quality assurance research, and strategy and policy development. The federal TVET agency has been in place since 2010 and plays a key role in the oversight of the NTQF, while the National Educational Assessment and Examinations Agency has oversight of the general education sector.

In **Kenya**, the Kenyan NQF is governed by the KNQA, which was set up in 2015 according to the Kenya National Qualifications Framework Act 22 of 2014. The KNQA is the chief advisor to the government on all matters pertaining to qualifications and the certificates issued by all qualification-awarding bodies. In this capacity, the KNQA is mandated to recognise and accredit all qualification-awarding bodies in institutions operating in Kenya, to regulate these qualifications and to liaise with government national examination and quality assurance departments, as well as professional and external quality assurance bodies, to confirm that all qualifications awarded meet the national standards and are internationally competitive. Governance of the qualification framework is seen as a key issue. The KNQA works closely with the Kenya Institute of Curriculum Development (KICD) and the TVET CDACC to ensure that the curricula being developed support the goals of the NQF. The KNQA is governed by a council consisting of the chairperson, appointed by the cabinet secretary, who appoints the director general, who is the CEO of the authority responsible for its day-to-day management. The TVETA and the Kenya Chamber of Commerce have started engagements aimed at establishing sector skills councils to guide skills training and curriculum development in the TVET sector. The KNQA will develop a national policy on establishing a sustainable skills development system and the development of occupational standards, working with various sectors. The TVETA needs to develop training standards to ensure that training matches the expectations of industry. Actual training will take place in technical and vocational training institutions, with the TVETA providing quality assurance. The National Industrial Training Authority (NITA), the Federation of Kenya Employers (FKE), the Kenya National Chamber of Commerce and Industry (KNCCI), the Micro and Small Enterprise Authority (MSEA), the Association of Professional Societies in East Africa (APSEA) and the Kenya Bureau of Standards (KEBS) should form the core of the team that should be involved in the coordination of this exercise and ensure that the roles and responsibilities of each player are well defined.

In **Morocco**, the government has delegated the leading and coordinating role of the NQF development to the Ministry of National Education, Professional Training, Higher Education and Scientific Research (MENFPESRS), and it is governed by two main commissions, the National Commission and the NQF Permanent Commission. The latter was established in July 2019 by ministerial decision and is entrusted with consolidating and operationalising the NQF and is composed of representatives from 20 public and non-public institutions and departments. Apart from the key departments of MENFPESRS in charge of policymaking and coordination in higher education, national education and professional education, the NQF Permanent Commission includes representatives from sector ministries, public employment services, public institution providers of professional training, the quality assurance agency of higher education, the alphabetisation agency, the higher council of education, the conference of presidents of universities, and the employers' confederation. The preparatory work to establish the independent qualifications agency is a task of the NQF Permanent Commission, including the consolidation and launch of operations of the NQF. The Permanent Commission has an ambitious mandate, with tasks of a strategic, operational and advisory nature, all oriented to lay a coherent groundwork between the components of the NQF system, to elaborate the specifications of the future autonomous NQF, to define technical aspects of the register of qualifications and information system, to harmonise the description of qualifications, and to prepare the new package of principles and tools underpinning the Validation des Acquis de l'Expérience (VAE, the validation of learning from experience). The Permanent Commission will benefit from technical assistance to put in place the regulatory framework, methods and capacities to implement the planned activities.

In **Mozambique**, there are currently two sub-systems of qualifications, each managed by a different institution. The Conselho Nacional de Avaliação de Qualidade do Ensino Superior (CNAQ) oversees the qualifications frameworks of higher education (QUANQES), while the National Authority of Professional Education (ANEP) leads and coordinates the qualifications framework of professional qualifications (QNQP). Discussion on governance of a new unified NQF is in an advanced stage of consultation. Since 2018, the CNAQ has coordinated and steered the development and consultation of the new unified NQF, by instruction of the Ministry of Science and Technology, Higher and Technical Vocational Education (MCTESTP). A National Qualifications Authority (NQA) is planned and will integrate all bodies governing the sub-systems of the national education system and the systems of verification and recognition of qualifications and academic degrees. It is noticeable that sector technical committees play a key role in assuring relevance and quality of the design of qualifications, by providing advice to ANEP on occupational groups and sub-groups in the various sectors of economic activity and their occupational profiles. Currently, twenty sector technical committees have been created for various professional areas/fields.

In **South Africa**, quality assurance of qualifications is the executive responsibility of three quality councils, while SAQA, as custodian of the NQF, oversees its further development and implementation and coordinates the three sub-frameworks. The NQF Act applies to all education and training programmes leading to qualifications and part-qualifications offered by education institutions and skills development providers. Since its inception, the NQF has had a number of reviews, which examined ways in which its management and administration could be improved. There are two ministerial departments responsible for the South African NQF, the Department of Basic Education and the Department of Higher Education and Training. The NQF sub-frameworks, each developed and managed by a quality council are:

- The HEQSF, covering NQF levels 5 to 10: quality assurance oversight provided by the CHE;
- The OQSF, covering NQF levels 1 to 8: quality assurance oversight provided by the QCTO; and
- The GFETQSF, covering NQF levels 1 to 4 (NQF level 1 is open-ended to include schooling qualifications). Quality assurance oversight is provided by the Council for Quality Assurance in General and Further Education and Training (Umalusi).

In **Togo**, the DECC acts as certifier for the depository of certificates for delivery on behalf of the Ministry of TVET. The DECC-General Education delivers all qualifications under the supervision of the Ministry of Primary and Secondary Education, while the Directorate of Baccalaureate delivers all baccalaureates, be they in Arts, Services, Industry, Sciences and Technology under the supervision of the Ministry of Higher Education and Research. The Directorate of Academic Affairs, University of Lomé, is pivotal in the higher education qualifications system. This directorate plays two roles: 1) course control for compliance with the training mock-up and validation; and 2) qualifications delivery. It is the custodian of implementation of the LMD system and is an important part of the quality assurance mechanism. The national agency for employment, the Agence Nationale Pour l'Emploi (ANPE) is a state agency that is linked to the prospects of developing a proper NQF in Togo. Its National Observatory for Employment and Training will provide research data and statistics on employment and training in Togo that should be factored into the alignment of vocational training with labour market needs.

In summary, this section has provided an account of important governance structures associated with NQF developments on the African continent. More advanced NQFs tend to be overseen by qualifications agencies and, overall, there is a trend towards national agencies as opposed to sectoral agencies. In cases where sectoral agencies, in TVET, higher education and general education, are well established, the national agencies provide a coordinating and oversight function. Ministries always play a key role in NQF governance and often act as incubators for the national and/or sector agencies that follow later. The risk of a multiplicity of agencies with overlapping mandates is very real, more so in countries with sparse resources.

The extent of the involvement of stakeholders in these systems and agencies is also very important. The International Labour Organisation has set out a list of stakeholders in the development of NQFs that may serve as a useful guide here. It extends from the 'more obvious stakeholders' to include a call for open public participation in a consultation process that allows any person or organisation to be considered having self-identified as a stakeholder (Tuck, 2007). Part of the list of world of work, sector council and education and training bodies identified are as follows:

- education and training providers;
- educators and teachers and trainers;
- professional bodies;
- awarding bodies and quality assurance agencies; and
- teacher and trainer staff associations.

3.3.4 Vision, scope and structure for qualifications frameworks and systems

The vision, scope and structural dimensions of qualifications frameworks cover quite a wide range of characteristics. For the purpose of the mapping study, the following aspects are discussed in this section:

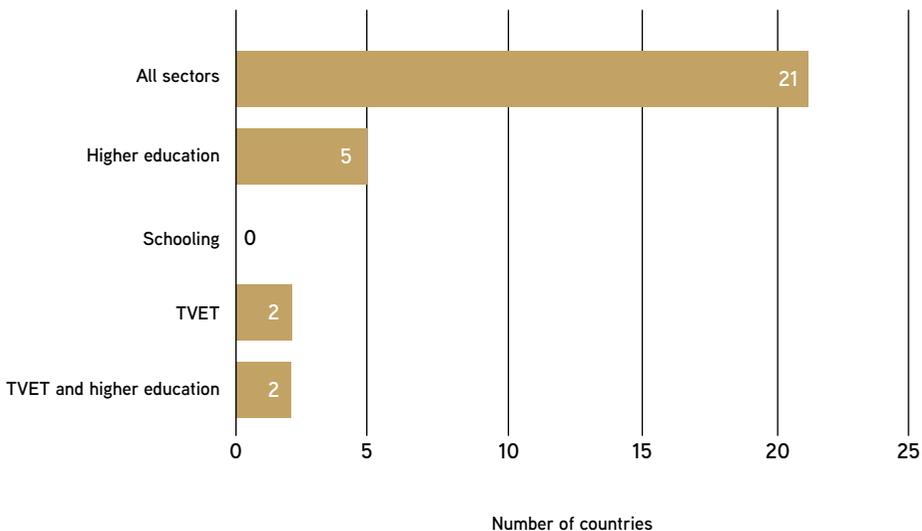
- purpose and objectives, ranging from reforming, to transforming, to communication;
- scope, varying from unified and sectoral (higher education, TVET, general education), from partial to comprehensive;
- levels, including the architecture of the framework; and
- inclusion of formal, non-formal and informal learning.

The domains employed in the various frameworks are discussed later in this chapter, while the level descriptors and qualifications types have been reviewed in the earlier sections of Chapter 3.

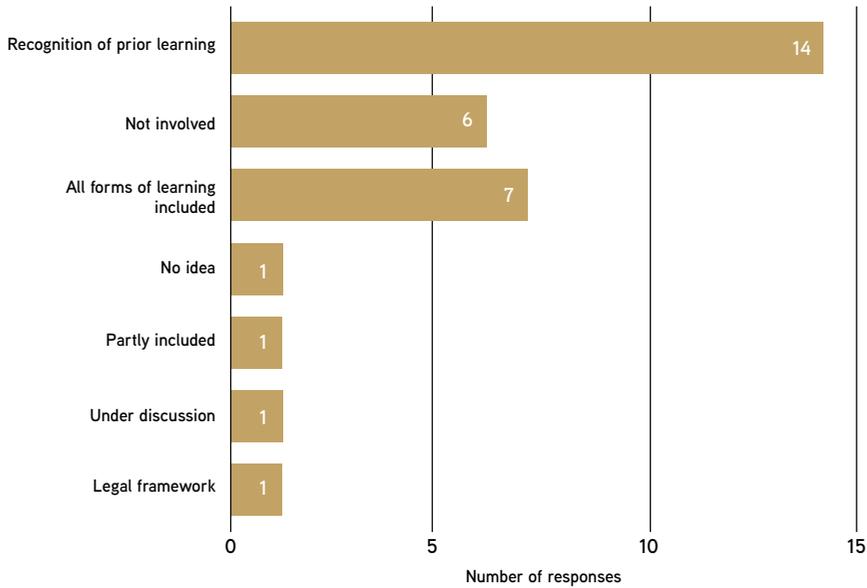
A summary of the scope and levels is provided in Figure 7, and further elaborated below. Figure 7 is from the online survey and shows that the majority of countries with qualifications frameworks are developing unified or national frameworks, even if sectoral frameworks are in place. TVET and higher education are the two sectors where sub-frameworks occur, while none are presently known in general education.

With regard to the inclusion of formal, non-formal and informal learning on NQFs, the data is limited to the online survey (see Figure 8), which shows that the more established NQFs (in this case, 14 responses) have some form of RPL included.

Figure 7: Scope of NQFs



Source: <https://bit.ly/ACQF-OnlineSurvey2019-20>

Figure 8: Inclusion of non-formal and informal learning in NQFs

Source: <https://bit.ly/ACQF-OnlineSurvey2019-20>

Specific country examples, drawing from the country case studies, are summarised below.

In **Angola**, the NQF is at an early stage of development and consultation, and completion of the concept and policy paper is expected by the end of 2020. On 12 August 2020, a new law (32/20) amended the Law on the Bases of the Education System (17/16) and introduced changes with implications for the SNQ (and NQF) currently in construction. In particular: a) article 19 stipulates that the SNQ will assure the articulation between the levels and outcomes of the national education system and those of the national system of professional training; and b) the revised structure of qualifications of higher education – the previous degree Bacharelato is eliminated and Licenciatura becomes the only degree of the cycle ‘graduation’. Law 32/20 foresees a change of teacher training qualifications, notably the phasing out of secondary pedagogic qualifications, to be replaced by higher pedagogic education. The national system of professional training, the Sistema Nacional de Formação Profissional (SNFP) is regulated by Law 21-A/92, which no longer responds to the national aspirations and economic orientation. Therefore, all actors agreed on the need to revisit this legislation. The ongoing work on the SNQ provides the opportunity and stakeholders’ platform to undertake this modernisation of the SNFP’s qualifications.

Cameroon has adopted the LMD system for higher education since 2007. The Law of Orientation of Education (1998) defines the cycles and sectors of education (pre-school, primary, secondary, post-primary, teacher training) and the levels at which qualifications are delivered.

Table 16: Sub-systems and levels of education and training in Angola

Levels	Sub-systems			
Higher Education-post graduation a) Master's: 2–3 years b) Doctorate: 4–5 years	Academic post-grad: Master's, Doctorate	Academic post-grad: specialisation (1 year); training (varied)	Pedagogic-academic post-graduation; Master's, Doctorate	Pedagogic-professional post-grad: aggregation; specialisation
Higher education-graduation: a) Licenciatura: 4–6 years	University education: graduation	Polytechnic education: graduation	Pedagogic education; Licenciatura	
2nd cycle secondary education	General education, 10th, 11th, 12th class	Technical – professional education (10th, 11th, 12th, 13th class)	Pedagogic education (10th, 11th, 12th, 13th) Magistério (this qualification will be phased out, according to article 124-A of Law 32/20)	Adult education: general (10–12th classes) and technical (10–13th classes)
1st cycle secondary education	General education: 7th, 8th, 9th class	Basic Professional Education (7th, 8th, 9th class)	Adult Education general and professional (7th, 8th, 9th class)	
Primary education	3rd cycle: 4th–6th class <hr/> 2nd cycle: 3rd–4th class <hr/> 1st cycle: 1st–2nd class	Adult education post alphabetisation: 3rd, 4th, 5th, 6th class) <hr/> Adult education post alphabetisation: 1st–2nd class		
Pre-school	Pre-school, kindergarten, crèche			

Table 17: Overview of the education system of Cameroon

Sub-systems	French-speaking system: Cycles, levels and titles of qualifications	English-speaking system: Cycles, levels and titles of qualifications
Higher education	<p>Doctorat</p> <hr/> <p>Master: BAC + 5 Master Recherche Master Professionnel Diplôme d'Ingénieur de conception DIPES2 (Diplôme de professeur d'enseignement secondaire for 2nd cycle) DIPET2 (Diplôme de professeur d'enseignement technique for 2nd cycle) DIPCO (Diplôme de conseiller d'orientation) DIPEN2 (Diplôme de professeur d'enseignement normal)</p> <hr/> <p>Licence: BAC + 3 / BAC + 4 Licence Académique Licence Professionnelle Licence Technique Licence d'Ingénierie DIPES1 (Diplôme de professeur d'enseignement secondaire), DIPET1 (Diplôme de professeur d'enseignement technique) for 1st cycle)</p> <hr/> <p>Short cycle higher education: BAC + 2 BTS (Brevet de Technicien Supérieur), HND (Higher National Diploma), DUT (Diplôme universitaire de technologie)</p>	
Secondary education (2nd cycle)	<p>General upper secondary (3 years) Technical upper secondary (services, industrial) (3 years) Diploma: BAC (Baccalauréat); BT (Brevet de Technicien)</p>	<p>General upper secondary (2 years) Technical upper secondary (services, industrial) (2 years) Diploma: GCE A/L (General Certificate of Education Advanced Level); BAC technical</p>
Secondary education (1st cycle)	<p>General lower secondary (4 years) – qualification: BEPC (Brevet d'Études du Premier Cycle) Technical lower secondary (services, industrial) (4 years) – qualification: CAP (Certificat d'Aptitude Professionnelle)</p>	<p>General lower secondary (5 years) – qualification: GCE O/L (General Certificate of Education Ordinary Level) Technical lower secondary (services, industrial) (5 years) – qualification: CAP (Certificat d'Aptitude Professionnelle)</p>
Primary education	<p>Class 1–6 Qualification: CEP (Certificat d'Études Primaires)</p>	<p>Class 1–6 Qualification: FSLC (First School Leaving Certificate)</p>
Pre-school education	<p>Cycle: petite – grande sections 2 years' duration</p>	<p>Cycle: nursery 1–2 2 years' duration</p>

In **Cape Verde**, the NQF was conceived as a structural component of the SNQ, not as a separate policy instrument. This is a fundamental characteristic that marks the nature and functions of the NQF, and its interconnection with the components of the SNQ, as defined in the specific legislation. The Cape Verde NQF has a comprehensive and inclusive scope, including qualifications from basic education to doctorate degrees, as well as qualifications obtained via validation of non-formal and informal learning. Article 3 of the new NQF legal Act of 2020 (Portaria Nr 10/2020) states that

The National Qualifications Framework covers basic, secondary and higher education, professional training and the processes of recognition, validation and certification of competences acquired through non-formal and informal ways, in accordance with the legislation.

The validation of non-formal and informal learning is consistently supported by the legislation regulating the SNQ, the NQF and by the Law on the Bases of the Education System (Decree-Law 3/2018). The NQF is structured in eight levels, from basic education to doctorate degree. Level 5 qualifications are provided by higher education institutions, by professional training centres and technical schools. The CNQ contains detailed information on qualifications of levels 2 to 5 offered by the TVET system. The University of Cabo Verde advertises courses of higher professional studies, in the fields of primary animal healthcare, hydrology and wells, childhood education, food processing and integrated horticulture.

Table 18: NQF levels in Cape Verde

NQF level	Qualification
1	Diploma of basic obligatory education
2	Diploma of adult basic education with double certification pathway corresponding to professional qualification of level 2 Certificate of professional qualification of level 2
3	Certificate of secondary education (10th class) Certificate of professional qualification of level 3
4	Diploma of secondary education (12th class general strand) Diploma of secondary education (12th class of technical strand corresponding to professional qualification of level 4) with double certification Certificate of professional qualification of level 4 with double certification of certificate of professional qualification of level 4
5	Diploma of higher professional studies (DESP) with training of professional qualification of level 5 (CESP-courses higher professional studies) Certificate of the complimentary professionalising class (CSP) with training of professional qualification of level 5 Certificate of professional qualification of level 5 with double certification Certificate of professional qualification of level 5
6	Degree <i>licenciatura</i>
7	Degree Master's
8	Degree Doctorate

The legal status of the **Egyptian** NQF is based on an amendment to Law 82 of 2006 that established the NAQAAE. However, the NQF levels and level descriptors are not included in this legislation, as is the case in some other countries. The intention is to develop a searchable database of all qualifications registered on the qualifications framework, and these should be competency based, as is already the case for pharmacy and engineering disciplines. There are two streams, academic and technical, with technical education commencing from NQF level 1 in each stream. The architecture of the Egyptian NQF is demarcated by an eight-level structure, with levels 1 to 3 for general schooling and levels 4 to 8 for post-school education. This makes it a comprehensive framework, designed to serve the purposes of all sub-sectors of education and training provision. Academic higher education has no qualifications at NQF level 4 and its first exit point at level 5, with further qualifications up to level 8. The proposed technical stream in higher education covers NQF levels 4 to 7, with no technical qualifications proposed for NQF level 8.

The proposed scope of the **Ethiopian** NQF is comprehensive, including all sectors (higher education, general education and TVET) and all national qualifications. A linked system, which allows for differences between sectors, is recommended over a unified system in which no difference between sectors is recognised. The undertaking of the Ethiopian NQF Taskforce in 2008 was to build on existing systems, which includes recognising that the sectors have different approaches to the development of assessment standards, and while all learning can be described in terms of outcomes, some types of learning are more suited to competency-based assessment than others. The scope of the framework includes some forms of what has been known as ‘non-formal’ training (basic and junior skills training), which is now included in the framework and therefore included in the formal system. The scope includes all formal qualifications offered by

Table 19: Ethiopian NQF

ENQF Levels	Sub-framework for General Education	Sub-framework for TVET	Sub-framework for Higher Education
8			Doctoral degree
7			Postgraduate diploma Master’s
6			Bachelor Professional graduate Diploma
5		TVET Certificate 5	
4	Diploma in Teaching	TVET Certificate 4	
3		TVET Certificate 3	
2		TVET Certificate 2	
1		TVET Certificate 1	

Source: Education Strategy Centre (2013) in Mwiria (2019)

Note: The use of the term ‘sub-framework’ is open to interpretation and further discussion. On a more conceptual level the Ethiopian NQF is designed with three sub-frameworks, while in practice, each of the sectors has evolved their qualifications systems in a more organic manner, with the TVET NQTF probably closer to a sub-framework, while general education and higher education are better described as sub-systems at this point.

private and public providers. The NTQF, in place since 2010, rationalises all TVET provisions into a single nationally recognised qualification. The qualification framework defines the different occupational qualification levels to be awarded. The NTQF allows for a national, comprehensive and flexible certification system for the TVET, sector as well as for lower and middle-level industry. It has three modalities to accommodate different interest groups, which are formal, non-formal and informal. Formal trainees join TVET after completing a minimum of Grade 10. A ten-level Ethiopian NQF was proposed in 2008 and was later amended to eight levels.

The **Kenyan** NQF is a learning outcome-based qualifications framework, covering all education and training sectors and all forms of learning: formal, non-formal and informal. The multiplicity of qualifications and awarding bodies in Kenya previously made it difficult for employers to understand what competences they could expect the holder of a qualification to possess. The NQF is intended to address this situation by establishing a common regulatory system for the development, assessment and award of qualifications. In addition, a central register of qualifications will set out clear criteria for the achievement of awards, detailing the knowledge and skills required in each case (Ministry of Higher Education, Science and Technology [MoHEST], 2014). The overall aim of the NQF is to promote access to and equity in education, quality and relevance of qualifications, evidence-based competence, and flexibility of

Table 20: Kenyan NQF

NQF level	General Further Education and Training sub-framework		Qualification	Notional hours (minimum)
10	Doctorate			3 600 after KNQA L9
9	Master's degree			2 400 after KNQA L7
8	Postgraduate diploma		Professional Bachelor's degree	1 200 after KNQA L7 or 6 000 after KNQA L2
7	Bachelor's degree		Master Craft Person I or Management Professional	4 800 after KNQA L2 or 2 400 after KNQA L6
6	National Diploma		Master Craft Person II or Professional Diploma	2 400 after L2 or 1 200 after KNQA L6
5	National Craft Certificate National Vocational Certificate-IV		Master Craft Person III	1 200 after KNQA L2 or after L4
4	National Vocational Certificate III/ Artisan Certificate		National Skills Certificate I (GTT-I)	600 after KNQA L2 or 300 after L3
3	National Vocational Certificate II		National Skills Certificate II (GTT-II)	300 after KNQA L2
2	Secondary Certificate	National Vocational Certificate I	National Skills Certificate III/ Government Trade Test (GTT-III)	Depending on skills acquisition
1	Primary		Basic Skills/skills for life	

access to and affordability of education, training assessment and qualifications. According to the NQF Act of 2014 the objectives of the framework are to help coordinate and harmonise education, training, assessment and quality assurance of all qualifications awarded in the country, with a view to improving quality and international comparability, and to creating a database of all qualifications in the country. The Kenyan NQF has ten levels and is linked across two sub-frameworks.

In **Morocco**, the NQF is defined as follows:

An instrument for regulation of qualifications based on objective characteristics of quality, in view of their recognition by the labour market. It is an instrument for referencing of qualifications, whose quality is in line with a quality assurance system that takes account of the learning outcomes, prescribed by the labour market following a prospective analysis.

Table 21: Moroccan NQF

NQF level	National Education	Professional training	Higher Education
1	Mid-primary	Certificate de Formation Professionnelle (CFP)	
2	Primary	Spécialisation	
3	CE9	Qualification	
4	Baccalauréat (Bac), Bac Professionnel (Bac Prof)	Technicien	
5 (Bac+2)	Brevet de technicien supérieur (BTS)	Technicien spécialisé	Diplôme Études Universitaires Générales (DEUG) Diplôme Des Études Universitaires Professionnelles (DEUP) Diplôme Universitaire de Technologie (DUT)
6 (Bac+3)			Licence Études Fondamentales (LF) Licence Professionnelle
7 (Bac+5)			Master Master spécialise (MS) Master Science et Techniques (MST) Diplôme d'ingénieur (DI) Diplôme de l'ENCG et diplôme de traduction
8 (Bac+8)			Doctorat

Note: 'Bac' stands for Baccalaureate (diploma of conclusion of secondary education)

Article 2 of the Framework Law on Education 51.17, adopted in 2019, partially confirms the above definition, but adds a new driving element beyond the labour market: the society.

The national certification framework: a tool for identifying and classifying diplomas at the national level, in accordance with a reference grid of applicable standards on different levels of learning outcomes, which takes into account the needs of the labour market and the development of society.

According to the Moroccan NQF Reference Document, the objectives of the NQF are, among others, to promote the quality of all programmes/courses in the whole education and training system, ensure coherence between the sub-systems of qualification, and to link qualifications and the labour market. The NQF is a comprehensive framework, encompassing qualifications of all sub-systems (national education, professional education and higher education), from public and private education and training institutions. Qualifications acquired outside the formal system, such as from sector international organisations, are not for the time being considered in the NQF. The Moroccan NQF is structured in eight levels.

The qualifications framework experience of **Mozambique** started in 2010. Currently, two qualifications frameworks coexist, QUANQES, which has been designed for higher education, and QNQP, which has been designed for TVET (non-tertiary). QUANQES is undergoing a revision in preparation of the upcoming adoption of the unified NQF of ten levels, and to reinforce mechanisms supporting more effective implementation by all higher education

Table 22: Mozambique's unified NQF (proposal of October 2019, under discussion)

Oversight	Qualification	NQF level	Specialisation	Oversight
CNAQ- Higher Education Qualification	Doctorate	NQF 10		ANEP
	Academic Master	NQF 9	Specialist Professional Master	
	Professional Licenciatura Postgraduate diploma	NQF 8	Higher Certificate 3	
	Academic Licenciatura	NQF 7	Professional Licenciatura Higher Certificate 2	
		NQF 6	Higher Certificate 1 Teacher training basic education Teacher training professional education Psycho-pedagogic training teachers' higher education	
		NQF 5	Professional upgrading	
Ministry of General Education	Diploma 12th Class	NQF 4	Vocational Certificate 5	
	--	NQF 3	Vocational Certificate 4	
	--	NQF 2	Vocational Certificate 3	
	9th Class	NQF 1	Vocational Certificate 2	

institutions. The new draft decree underpinning the revised QUANQES is in consultation. The national TVET qualifications framework includes only qualifications from non-tertiary TVET, in a structure of five levels. The new unified Mozambique ten-level NQF is in an advanced stage of development and consultation, and aims to coherently align the two frameworks under the new common structure of levels and descriptors, but the two frameworks will continue to be applied within the respective sub-systems. The principles, objectives and norms of the new unified NQF will be binding for all providers of education and training that are legally established and providing training leading to qualifications of all sub-systems of the National System of Education. With the future adoption of the unified NQF, three (or four, if general education is considered) sub-qualifications frameworks will coexist and interact with the NQF.

Senegal has no NQF that accommodates and integrates all occupational/TVET and academic qualifications, but there is an existing NVQF (five levels) and a higher education qualifications framework (LMD). A new approach to TVET implies that market needs are the foundation and indicators for access, relevance and consistency of the future development of the TVET system. The Policy on the Development of Education and Training (2003) called for strengthening TVET programmes and linking them to the needs of the labour market. The 2015-01 Act on the Orientation of Vocational and Technical Training stands as the fundamental TVET legislation defining the five levels of qualification.

The **South African** NQF was established as an integrated system underpinned by a transformational agenda, in order to promote lifelong learning for all South Africans. Through this integrated and transformational system, the NQF can achieve its purpose of articulation, recognition, access and redress across education, training, development and workplace learning. The South Africa NQF consists of three sub-frameworks, the GFETQSF, the HEQSF and the

Table 23: South African NQF with sub-frameworks

Level	Sub-framework and qualification types		
10		Doctoral degree Doctoral degree (Professional)	
9	HEQSF	Master's degree Master's degree (Professional)	
8		Bachelor Honours degree Postgraduate diploma Bachelor's degree (480 credits)	Occupational Certificate level 8
7		Bachelor's degree (360 credits) Advanced diploma	Occupational Certificate level 7
6		Diploma Advanced Certificate	Occupational Certificate level 6
5		Higher Certificate	Occupational Certificate level 5
4	GFETQSF	National Certificate	Occupational Certificate level 4
3		Intermediate Certificate	Occupational Certificate level 3
2		Elementary Certificate	Occupational Certificate level 2
1		General Certificate	Occupational Certificate level 1
			OQSF

OQSF. Each sub-framework is administered by a quality assurance council – Umalusi, the CHE and the QCTO. As further shown in Table 23, each sub-framework consists of various levels of qualifications.

The certifications and qualifications currently offered by the METFP in **Togo** are structured around the two traditional areas of vocational training and technical education. This is based on a hierarchy or classification designed according to the notional duration of training course curricula inputs required for transmission of theoretical knowledge, expressed in years. Consequently, in most cases, learning assessments do not emphasise outputs, conceived in terms of the occupational capabilities or skills acquired as a result of learning, or responses to the needs of the labour market to deliver certifications. The qualifications landscape further includes certifications or qualifications currently offered by the other ministries, namely the Ministry of Primary and Secondary Education and the Ministry of Higher Education and Research. There is no standardised nomenclature of qualifications in Togo. Specific sectors such as banking have their own institution-governed qualifications systems.

3.3.5 Quality assurance

Quality assurance is defined as ‘the processes of ensuring that specified standards or requirements for teaching, learning, education administration, assessment and the recording of achievements have been met’ (SAQA, 2014, p. 48). Quality assurance is about providing confidence in education services under the remit of a responsible agency. NQFs provide the initial basis for quality assuring qualifications as they describe the levels of complexity of qualifications within the framework, the criteria for being included in the framework, requirements for linkages to other qualifications, and rules around recognition of non-formal and informal learning. Linked to the NQF are specific quality assurance processes that address:

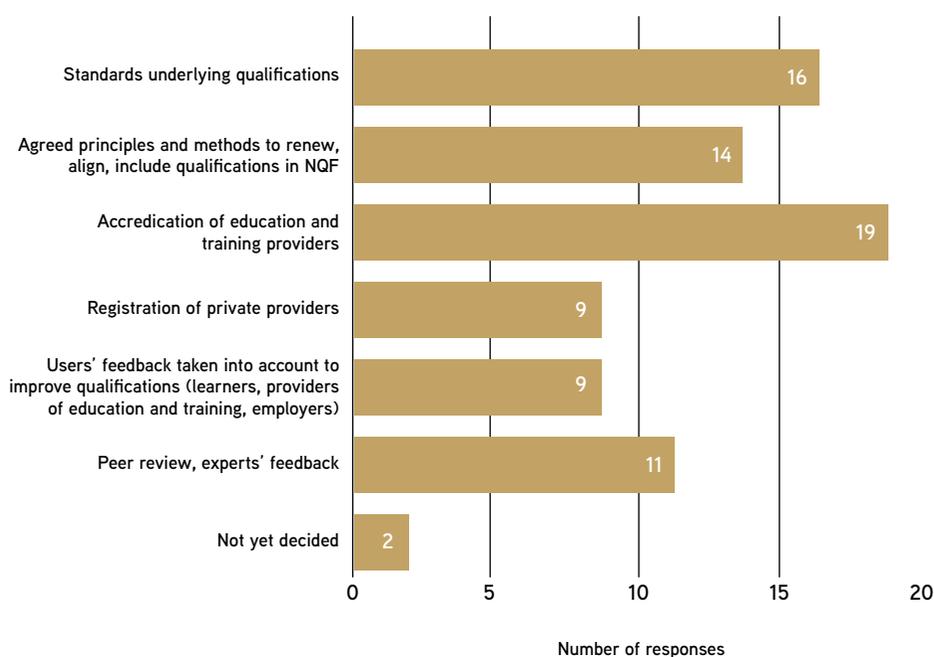
- › the product – that is the achievement standards (such as education or competency standards) and the completion rules for a qualification;
- › the providers of the product – through evaluation of the infrastructure and facilities, financial probity and health, staff qualifications and experience, management systems, delivery systems, assessment systems and student support systems;
- › the monitoring and auditing of provider processes and outcomes – includes evaluation of student learning and employment outcomes, and student and employer satisfaction levels;
- › the control, supervision or monitoring of assessment, completion and certification processes;
- › provider or system-wide evaluations – which could include evaluations by external agencies; and
- › the provision of public information on the performance of providers such as programme completions, employment outcomes, and student and employer satisfaction (Bateman et al., 2012).

The mapping study focused specifically on aspects of quality assurance directly related to qualifications frameworks. The following main indicators of NQF-related quality assurance were explored in the online survey and then refined in the review of literature and case studies:

- › standards underlying qualifications;
- › agreed principles and methods to renew, align, include qualifications in NQF;
- › accreditation of education and training providers;
- › registration of private providers; and
- › the extent of stakeholder consultations was also factored in, notably with learners, providers of education and training and employers, to improve qualifications, as well as peer reviewers where applicable.

As before, the online survey demonstrated variation in each of the aspects.

Figure 9: Quality assurance mechanisms linked to the NQF



Source: <https://bit.ly/ACQF-OnlineSurvey2019-20>

Angola has launched legislation and reforms in the last two years to establish a comprehensive system of quality assurance in higher education, to instil a culture of continuous improvement of the performance of higher education institutions and to enhance the credibility of the sub-system. Quality assurance of higher education consists of a set of processes: a) self-evaluation by higher education institutions; b) external evaluation, verification and analysis of quality of performance of higher education institutions carried out by external entities; c) institutional evaluation, gauging the quality of performance and results of higher education institutions; and d) accreditation, certification of quality of higher education institutions and their courses/programmes, after a positive result of an external evaluation promoted by the relevant department

of the ministry in charge of higher education. Other new policies intend to contribute to the quality of higher education programmes are: a) reform of curriculum, through new general curriculum standards, aiming to harmonise curriculum content and plans within study domains; and b) teacher education, benefiting from sizeable PNFQ support. The Presidential Decree 203/18 (article 19) entrusts INAAREES with the responsibility of assuring implementation and development of evaluation and accreditation of quality in the sub-system of higher education. INAAREES is a specialised service of the ministry in charge of higher education, not an independent quality assurance agency. In TVET the PNFQ addresses quality assurance as a multidimensional framework combining a) information and observation systems to collect, systematise and analyse data and information about supply and demand of training and the labour market insertion of graduates/trained persons; b) employability studies, a qualitative analysis of qualifications profiles and the competence profiles of graduates; c) certification of training institutions, evaluation, accreditation and recognition of courses, standards to gauge and guarantee the quality of institutions, courses and qualifications; and d) training of teachers and trainers to improve their competences and performance.

The Strategy of the Education and Training Sector 2013–2020 of **Cameroon** gives priority to quality and relevance, defined as improvement of quality of learning and adaptation of content to socio-economic environment (second strategic strand). In higher education, the government undertook steps to put in place a system of quality assurance, which is coordinated by the Department of University Accreditations and Quality of the Ministry of Higher Education. The department presented its self-assessment report, which served a basis for the first pilot external evaluation conducted in 2018 to test sections B and C of the *African Standards and Guidelines for Quality Assurance (ASG-QA)* under the HAQAA Initiative. The evaluation notes progress in the following: a) instruments and guidelines to support quality assurance processes (internal, external), disseminated to higher education institutions and based on international practice; b) regular annual evaluation of institutions and education programmes, in place since 2015; c) implementation of activities to develop and instil a culture of continuous improvement; and d) elaboration and ongoing discussion of the draft specifications for establishment of a fully autonomous quality assurance agency. In the pre-tertiary sub-systems of education and in TVET, coordinated by different ministries, the quality assurance approach relies on the functions of the respective Inspectorates. Exchanges with national experts and ministries and national analyses of the system of technical education and professional training, consulted for this mapping study, provide evidence that efforts are being taken by the relevant ministries to implement and improve the existing quality standards, renew and update competence-based curricula, and improve teacher and trainer training. At the same time, the authorities acknowledge that the overall quality and the achieved learning outcomes in technical education and professional training are adversely affected by numerous factors, such as obsolete and insufficient training infrastructure and equipment for practical learning, insufficient cooperation with employers, and issues related to the challenging socio-political context, aggravated in recent years.

In **Cape Verde**, Decree-Law 6/2013 established the legal regime for accreditation of training institutions in relation to the provision of courses and programmes of professional training. In professional training, quality assurance processes consist of harmonised development and validation of qualifications (professional profiles and training plan and modules) and their inclusion in the CNQ, as well as the accreditation of institutions providing training. Only those institutions holding a valid accreditation licence (Alvará) can operate as training providers in the field of professional training. The accreditation system for professional training entities applies to

all public or private entities, national or foreign, regularly constituted or registered in Cape Verde, with legal personality, which meet all the requirements established in the accreditation regime of entities for the development of initial and/or continuing vocational training courses. The Cape Verde Ministry of Education is responsible for quality assurance of secondary schools, notably for their licensing. Moreover, those secondary schools (technical) providing training programmes included in the Catalogue of TVET Qualifications shall be accredited by UC-SNQ. This outreach of the UC-SNQ's system of accreditation is fundamental to ascertain coherence and supervision over the performance of providers and the final trustworthiness of the achieved professional qualifications of the CNQ.

The legal basis for the quality assurance of qualifications for the NQF in **Egypt** is the NAQAAE, which is the governing body responsible for the NQF. Quality assurance of the qualifications that will be registered on the Egyptian NQF is linked to the programme accreditation process, where only programmes that have been accredited will be eligible to register in the related qualification on the NQF. Programmes in Egypt are only assessed for accreditation after the first cohort of learners has passed through and this is in itself a quality assurance mechanism. At this early point of implementation, the NAQAAE reports that it is the only agency that will be a quality assurance agency for the NQF, but it was acknowledged that more agencies for quality assurance may be enlisted once full implementation commences. It is noted that there is progress towards the establishment of an Egyptian TVET quality assurance and accreditation national authority.

Quality assurance practices within the education system in **Ethiopia** are relatively under-developed. Providers are unfamiliar with concepts of quality management, internal quality assurance and moderation, and the society is accustomed to a high level of authoritative direction and lower levels of personal choice than are customary in some societies. Validation of programmes is currently practised separately in the three sectors, using various sector-specific guidelines and processes. Programme validation looks at issues of relevance/demand for the programme, as well as the consistency of the programme proposal with the technical requirements for framework qualifications. A broad set of draft validation criteria for programmes leading to the award of Ethiopian NQF qualifications is provided for consultation in the Implementation Plan. Moderation ensures that required standards of attainment are appropriate and are consistently applied. The use of external examiners (higher education) or externally administered examinations (general education) or centralised testing (TVET centres of competence) all provide for moderation of assessment. External moderation of programmes needs strengthening, especially in higher education (for example, through arrangements overseen by HERQA with other universities in Ethiopia and in other countries that offer the same or comparable programmes), and all providers should make arrangements for internal moderation of continuous assessment. Examples of pre- and post-moderation of assessment questions are included in the Implementation Plan.

Diplomas and certificates offered by **Kenyan** universities must be approved by the TVETA and the Commission for University Education (CUE). For an institution or qualification to be registered in the NQF, it must be accredited by a recognised quality assurance agency. Registration in the NQF assures an academic institution, and the courses that it offers, of (inter)national recognition. One of the key goals of the NQF is to assess and recognise the outcomes of learning in all settings, whether formal, non-formal or informal, including in the workplace. A number of measures are being taken to pursue this goal. Progression pathways from primary to higher education in the TVET sector are being promoted through the TVET Curriculum Development Framework (TCDF), which was established in 2010 and meets the requirements and principles

of the NQF occupational standards. This is helping to link youth polytechnics and vocational and industrial training qualifications to formal TVET provision. The KNQA is in the process of developing occupational and training standards for various professions in the country; and in 2018, launched Competence Based Education and Training (CBET). Three international standards guide the assessment of skills in Kenya: the International Labour Organisation's ISCO 88 Standard, UNESCO's ISCED 97 Standard, and the ISO Standard 9000 Series on Education. In addition, the Kenya National Occupational Classification Standard (KNOCS) guides the exemption and credits transfer system, which is promoted through a combination of conventional testing methods and e-assessment methods for RPL. The authority is in the process of developing and implementing the Kenya National Classification of Education Standard (KNCES).

In **Morocco**, the NQF is viewed as a major incentive and tool for quality assurance. Higher education has developed a substantial legislative-regulatory framework for quality assurance, and, in 2014, established a specialised autonomous institution, the Agence Nationale d'Evaluation et d'Assurance Qualité de l'Enseignement Supérieur et de la Recherche Scientifique (National Agency for Evaluation and Quality Assurance of Higher Education and Scientific Research, ANEAQ). Quality assurance of higher education is based on internal and external evaluation and accreditation. In 2018, ANEAQ participated in the first external evaluation conducted by the HAQAA initiative as a pilot test of ASG-QA, and the report is published on ANEAQ's website. Professional education, under the leadership of MENFPESRS, is engaged in strengthening the system of quality assurance. Since 2014, a comprehensive system of performance monitoring has been in development, of which the quality assurance framework is a major component. Practical implementation is underway, focusing on self-evaluation of public and private providers of professional education. Other elements of quality assurance in professional education are: a) the methodology of the APC; and b) regular surveys of employment outcomes and further education of graduates (graduate tracer studies), whose methodology and coverage is currently undergoing substantial upgrading. Private TVET operates under a considerable legal framework, regulating major aspects of quality assurance.

In **Mozambique**, the higher education qualifications framework (QUANQES) operates in close articulation with the SINAQES. Decree 63/2007 laid down the legal base of SINAQES. The CNAQ is the national quality assurance agency in higher education. The CNAQ submitted its first self-evaluation report in 2018, which laid down the reference points for the pilot external evaluation in the context of the HAQAA to test the ASG-QA. The CNAQ self-evaluation report aligned the CNAQ with the ASG-QA. The report of external evaluation of the CNAQ (Texeira et al., 2018) was elaborated upon on a mission to Mozambique and presents recommendations on compliance with AGS-QA – Part B. In professional education, Law 6/2016 defines the System of Registration, Evaluation, Accreditation and Quality Assurance of Professional Education (SNACEP) as a multidimensional framework, of which the QNQP is a component. Quality assurance is based on governance, rules and standards at macro- and micro-levels and ANEP is the lead organ.

In **Senegal** the only effective quality assurance body is the national quality assurance authority for higher education, the ANAQ-SUP, which was created as a state agency with financial and institutional autonomy. It is a regulatory structure responsible for the control, assurance and improvement of the quality of higher education programmes and institutions. Quality assurance of higher education is based on internal and external evaluation of programmes and institutions. The website of ANAQ-SUP contains the full set of information and guidelines for evaluation.

In **South Africa**, quality councils are guided by the NQF Amendment Act of 2019 and have continued with quality compliance work and enhanced development standards despite changes and developments in the NQF. Each quality council is responsible for developing and implementing policy for quality assurance, ensuring the integrity and credibility of quality assurance, and ensuring that such quality assurance as is necessary for the sub-framework is undertaken.

Although there is embryonic quality assurance at the University of Lomé, **Togo** does not have a quality assurance framework with potential to support its qualifications regulatory activities, apart from CAMES. However, the 2017-005 Act provides in section 8, article 39 on quality assurance that

The mission of quality assurance is to contribute to ensuring the quality of the higher education system, its institutions and training courses. Quality assurance is organised in all higher education institutions and within the Ministry in charge of Higher Education by bodies whose composition and mission are defined by specific texts.

An external evaluation mission in Togo was conducted in December 2018 in the context of the HAQAA initiative (EC EAC/37/2014), a programme of the European and African Union Commissions in the frame of the EU-AU strategic partnership. The report of this external evaluation provides recommendations regarding the planning and organisation of the legal basis for the quality assurance agency and dissemination of the ASG-QA. It is noteworthy that the ASG-QA explicitly addresses the links of internal quality assurance (higher education institutions) with the learning outcomes principle as well as with NQFs (Standard A7).

3.3.6 Learning outcomes and domains

As mentioned in Chapter 2, the use of learning outcomes has become pervasive internationally, and African countries have also been part of this shift, specifically in how learning outcomes are defined, described and used in different contexts: in level descriptors, in standards underlying qualifications, in training standards, curricula, and assessment standards. The strong presence of TVET systems with competency-based models in many African countries is important to recognise, as well as the shift that these systems will need to make to utilise learning outcomes in the new paradigm. Clarification on the application of learning outcomes in curricula and learning programmes, in addition to qualifications, also seems to be a persistent issue. In the section below, we provide examples of these applications and, in some cases, tensions, on the use of learning outcomes. We also provide information on the learning domains most frequently utilised in these examples.

In **Angola**, elements of the learning outcomes approach are being applied in current programmes and qualifications of higher education and programmes of professional training. The learning outcomes approach in higher education is being strengthened through ongoing reform, introducing new curriculum standards for graduation-level qualifications in higher education, which stipulate that learning outcomes and content defined in terms of knowledge, skills, attitudes and values are integral parts of the new structure of analytical programmes (curricular units). Presidential Decree 193/18, approving the general curriculum standards for graduate courses (licenciatura), provides guidance on principles, concepts and structural elements of curriculum of graduate courses. The renewed process to design curricula and

qualifications is organised in sectoral commissions consisting of academia, as well as sectoral and professional associations and orders. All higher education institutions will revise their programmes and adopt the new standards by the end of the academic year 2020. The roadmap to develop the SNQ includes the elaboration of a renewed curriculum and qualifications development methodology, based on learning outcomes (standards, units of competence) for TVET.

In **Cameroon**, the programmes and qualifications of secondary technical education are organised in two sections and two levels (cycles). The sections are 1) a section of industrial techniques, offering 67 specialisations; and 2) a section of commercial techniques or techniques of the tertiary, with 18 specialisations. The levels are: 1) the first cycle (four years, leading to Certificat d'Aptitude Professionnelle (CAP); and 2) the second cycle (three years, with the Baccalauréat as the final award, and for certain specialisations, the Brevet de Technicien). The competence-based approach has been in place for part of the programmes and qualifications in the Education System, Technical Teaching and Vocational Training (ESTP). The process of renewal of curricula of qualifications in both sections and cycles in line with the competence-based approach (APC) started in 2004. According to the stocktaking study of the Ministry of Secondary Education, all programmes of the section of techniques of the tertiary (services, commerce) have been structured according to the APC, while in the section of industrial techniques, the shift to the APC has been completed for programmes of the first cycle, and is underway in those of the second cycle. The Ministry of Secondary Education (MINESEC) expresses concern that a share of ESTP programmes and qualifications are still based on standards from 1991, elaborated with international support decades ago.

The application of the learning outcomes approach in the design and description of qualifications is one of the key objectives of the NQF in **Cape Verde**. From the standpoint of SNQ-NQF policy, the application of the learning outcomes approach is viewed as necessary to promote validation of non-formal and informal learning, thereby offering vulnerable citizens possibilities to access lifelong learning and to enter the labour market. Learning outcomes appear to play a manifold role in the conceptual and technical design of units of competence of occupational profiles and in training modules, which together structure qualifications; and in making the access to qualifications socially minded, and inclusive for citizens with a limited schooling history but tangible life and work experience. From the standpoint of governance of the TVET sub-system in Cape Verde, the application of the learning outcomes approach is well rooted and established in the design, management and acquisition of qualifications (training, assessment and certification).

The conceptualisation and structure of the NQF in **Egypt** is based on an outcomes-based approach. Focus group discussions, held early in 2020 to inform this report, agreed that more than three-quarters of all curricula in Egypt use learning outcomes.

The proposed **Ethiopian** NQF firmly promotes the use of learning outcomes across all levels and sectors of the Ethiopian education and training system. The extent to which the current system is ready for this move is more contentious, as noted in the Ethiopian Education Development Roadmap (2018–2030):

It is puzzling however why learning outcomes are so low in Ethiopia in spite of the fact that many new initiatives such as book supply, teacher qualification, plasma education, new curriculum, school improvement packages, etc. are introduced. One possible explanation could be that the system was 'accountability incoherent' (vertically and horizontally) for learning outcomes (Teferra et al., 2018, p. 25).

The perceived low uptake of learning outcomes requires deeper interrogation. Anecdotally, it may be that the system lacks the technical support to allow for the conceptual transition to be more explicitly manifested in documents. In practice, the use of learning outcomes is not contested and, it could even be argued, has become pervasive in the Ethiopian system.

The learning outcomes-based qualifications are well rooted in the TVET sub-system in **Morocco** through the longstanding traditions of the APC. In higher education, the regulatory framework defines the rules for designing programmes (for accreditation) at all cycles and levels. The detailed structure for programmes leading to qualifications is provided in the National Pedagogic Standards, which are specific for each qualification level and type. For accreditation, programmes must include objectives of training, competences to be acquired, employment opportunities of the qualification admission conditions, pathways and links with other programmes. All higher education programmes are structured in modules of learning.

The learning outcomes approach is well established in both sectoral frameworks in **Mozambique** – in QUANQES and the QNQP. Their legal base defines learning outcomes as a principal component of conceptual-technical design and implementation. The methodological underpinnings of qualifications and curriculum design, delivery and assessment are competency-based (units of learning outcomes, modules). Both sub-systems developed and use a methodological framework and guidance materials to support providers and quality assurance experts in developing programmes and qualifications, and in evaluating them.

In **Senegal**, the level descriptors are not based on learning outcomes, but rather on occupational positions. However, the TVET sector takes into account both skills acquisition as a result of demonstration of learning outcomes and meeting labour market demand.

Both specific outcomes and critical cross-field outcomes are widely used in the **South African** NQF. The NQF describes qualifications in terms of the learning outcomes that a qualified learner is expected to display. Each registered qualification has specific outcomes to be achieved by a learner. A specific outcome can be defined as the demonstrated competencies a learner would acquire during the education, training and development process. These competencies are particular to a specific context and learning programme, and are thus distinct from critical outcomes that underpin learning processes across all contexts. Qualifications must stipulate the expected critical cross-field outcomes, and opportunities must be made available to develop and assess these critical cross-field outcomes within learning programmes.

In **Togo**, qualification levels of certificates, degrees and diplomas are based on a hierarchy of course duration, with no reference to learning outcomes, occupational positions or meeting labour market demand. Basic education, TVET and higher education all follow the diploma hierarchy coupled with the course duration process. Development of qualifications is more linked to acquisition of academic knowledge and occupational practice to meet course standards.

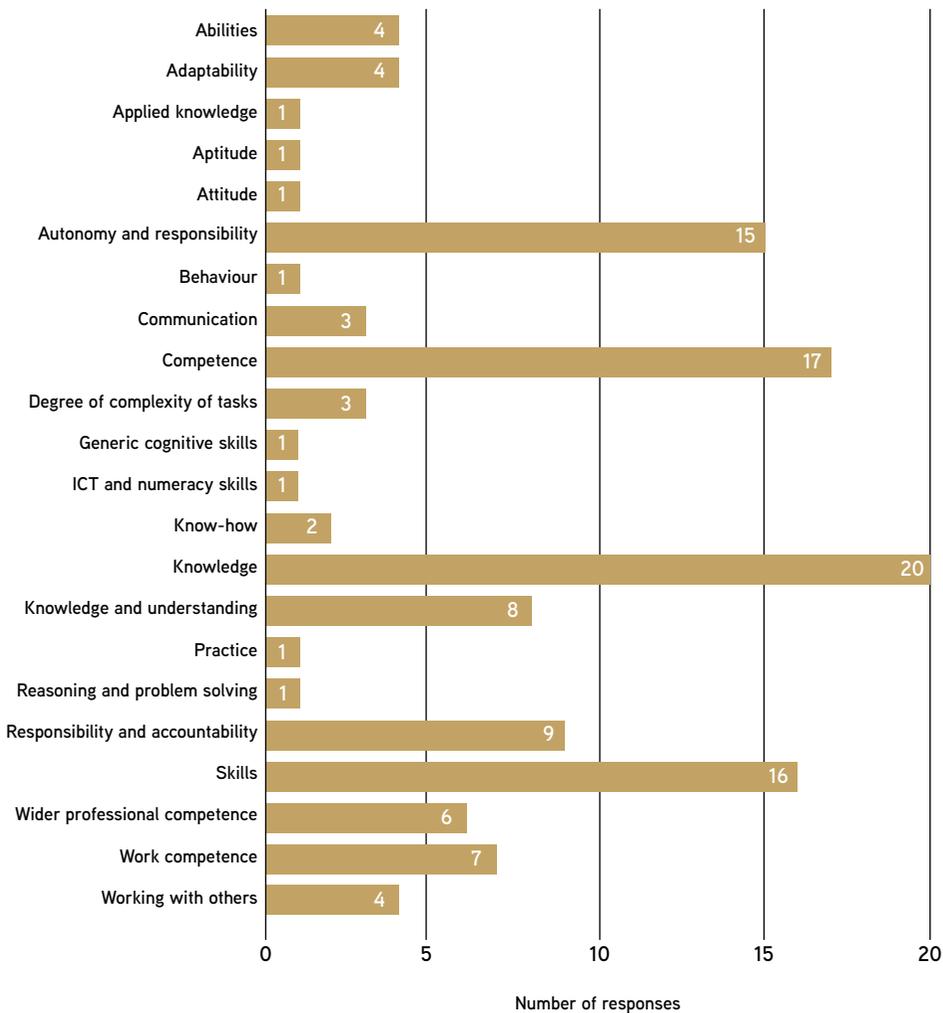
All qualifications listed on the EAQFHE will contain outcome statements, which describe the knowledge, skills and attributes of a graduate. The outcome statement is designed to be used by prospective employers and other tertiary education organisations, and for comparing qualifications. Different learners will achieve the outcomes in different ways, so outcome statements indicate the minimum achievement expected from a qualification. Each outcome statement includes information on:

- › Graduate profiles that identify the expected learning outcomes of a qualification. This is captured in notions of what a learner will know and understand, and be able to do when they achieve the qualification.

- Education pathways that identify other qualifications that a graduate could enrol in after completing this qualification. Where qualifications stand alone, and do not prepare graduates for further study, the outcome statement should make this clear.
- Employment pathways or contributions to the community that identify the areas in which a graduate may be qualified to work, or the contribution they may make to their community (EAC, 2019).

In Figure 10, we provide an overview of the level descriptor domains used in the NQFs that we represented in the online survey. These domains are used to categorise different types of learning described through learning outcomes and captured in qualifications. Internationally, such domains usually number between three and five for a specific NQF, but there are exceptions.

Figure 10: Learning domains used in level descriptors of NQFs (online survey)



Some established NQFs in Africa use six domains of level descriptors which, besides knowledge, skills and autonomy and/or responsibility, include domains such as adaptability, complexity and communication (Morocco, Tunisia). From the survey results, the domains used across the NQFs in Africa vary, but there is a visible convergence towards knowledge, skills, competency, and autonomy and responsibility. Important to note is that if combined, 30 responses to knowledge, know-how, and knowledge and understanding are reported. The list of domains also overlaps in some respects, and more work will have to be done to cluster and develop these domains.

One of the key variables when developing or establishing learning outcomes is the competences that underpin level descriptors. Learning outcome content derives from standards of occupations in The Gambia, Ghana and Senegal, and competences refer to the different cognitive, practical and attitude components required for actual occupational positions and roles. Therefore, learning outcomes correspond to the combination of those components expected at the end of a learning process assuming the competences. Nevertheless, while learning outcomes are explicitly associated with competency levels in the formulation of level descriptors in The Gambia, Ghana and Senegal, Nigeria's referencing of academic and technological qualifications seems to go beyond and describes broader competency profiles.

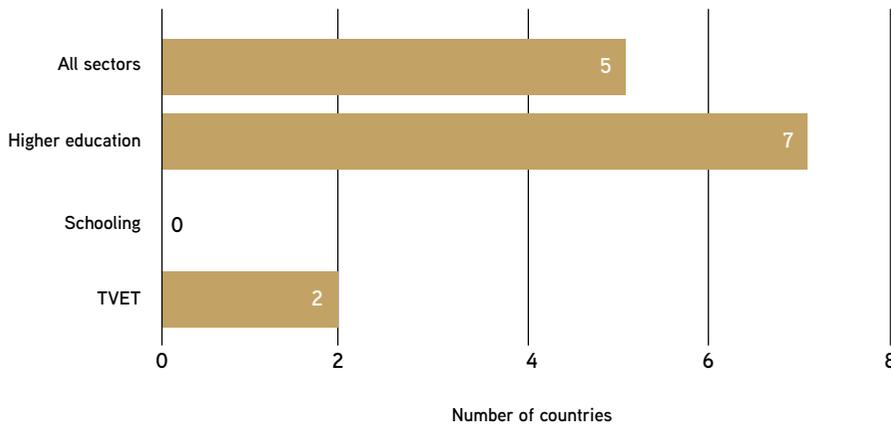
3.3.7 Credit systems

A credit is defined as a measure of the volume of learning required for a qualification or part-qualification, quantified as the number of notional study hours required for achieving the learning outcomes specified for the qualification or part-qualification. For at least twelve respondent countries in the online survey, the general rule that 10 notional hours is equivalent to one credit was in place, where notional hours include a wide range of learning-related time, such as preparatory work, laboratory work assignments and class time. For one country, one approved credit in higher education is equivalent to 25 to 30 notional hours. Higher education is strongly represented in the responses as the use of credits in higher education predates the introduction of NQFs. While some basic information on the formulae used in different countries to determine credit points at different levels was found in the mapping study, a deeper analysis is recommended as more information comes to light.

The countries' analyses and desk research undertaken in this mapping study confirmed the co-existence of different models, notably the model 1 credit = 25–30 hours in the countries adhering to the LMD system, in which a semester of learning corresponds to 30 credits. One country is freshly introducing the credit transfer system in higher education (1 credit = 15 notional hours). There are cases of countries with different models: a) in TVET qualifications framework 1 credit unit = 10 notional hours; b) in the higher education qualifications framework 1 credit = 25–30 notional hours.

In **Angola**, the credit system in higher education was introduced by Presidential Decree 193/18, which defines the use of credit units as a means to quantify and structure learning and harmonise courses according to comparable standards. One credit unit corresponds to 15 hours of workload, while curriculum units in higher education may have a credit value between 1 and 20 credit units. The credit system is active in higher education only.

In **Cape Verde**, the system of credits of TVET is based on the attribution of credit points to qualifications of double certification in the NQF, which are integrated in the CNQ. The specific regulatory text is in development. Credit accumulation and transfer is permitted to enable mobility, notably in the space of ECOWAS and the EQF. Moreover, the credit system will apply to other certified training not integrated in the CNQ but based on valid quality assurance criteria.

Figure 11: Use of credit systems

Source: <https://bit.ly/ACQF-OnlineSurvey2019-20>

Legislative Decree 13/2018 determines that organisation of education provided by higher education institutions is based on the credit system and defines credits as the measure of the number of hours of student workload. The number of hours of student workload considered in the definition of the number of credits includes all forms of academic work – contact hours, hours for practical learning (internships), fieldwork, individual and group study and evaluation. Decree-Law 22/2012 in article 52 stipulates that the number of credits allocated by curricular unit is defined in accordance with a set of principles, including, among others: ‘The number of credits corresponding to the workload of one curricular year in full time is 60’. This definition is aligned with the ECTS.

Key objectives of the **Egyptian** NQF include the establishment of progression pathways and rules to accredit prior learning. No detailed rules for implementation have been defined yet. The fragmented vocational education and training landscape and the absence of an implemented NQF impede vertical progression in qualification levels and do not adequately support mobility between systems. Nevertheless, NQF objectives are linking TVET and the general education systems, promoting level progression and permitting horizontal mobility.

The existing system in **Ethiopia** is a credit-hours system whereby credits are allocated according to the number of contact hours per week. This system has some disadvantages, including being unsuited to the recognition of learning that is self-directed and occurs experientially, or through non-contact modes of delivery. A proposed alternative method of quantifying learning, based on notional learning hours, was proposed in 2008. The development of qualifications within the Ethiopian TVET Qualifications Framework (ETQF) has been the most progressive, with a strong focus on a standards-based approach.

In the **Kenyan** NQF, one ‘credit’ represents: 1) the value assigned for ten notional hours of learning; 2) the recognition of equivalent in content and learning outcomes between different types of learning; or 3) the amount of learning required to achieve a qualification, which may be through credit transfer, articulation, recognition of prior learning or advanced studying, based on the number of notional hours for a specific qualification.

In **Morocco**, the core strategic and legislative base of education and training, such as Law 01-00 on higher education and Law 16-17 on education, recognises the importance of better-

organised pathways between sub-systems and education institutions, and the introduction of *passerelles* to foster re-integration of learners, continuation of studies and reskilling in a lifelong perspective. The higher education sub-system undertook pilot initiatives to develop a credit accumulation and training system, but a credit system has not been mainstreamed yet. In the sub-system of vocational education and national education, the adoption of a credit system is not considered a priority at the moment.

In **Mozambique**, QUANQES and the QNQP operate in close articulation with the respective systems of credit accumulation and transfer, which are mandatory for all programmes and qualifications. The National System of Credit Accumulation and Transfer (SNATCA) defines one credit unit as equal to 25–30 hours of learning workload, which includes not only hours of direct contact with teachers in theoretical, practical and laboratory classes, but also the hours necessary for individual study, elaboration of assignments and preparation for exams.

3.3.8 Qualifications management: Registers, databases and catalogues of qualifications

International practice shows that the establishment of qualifications databases and registers contribute to making NQFs operational, improving transparency, outreach and public use. The ACQF mapping study found different situations and dynamics with respect to qualifications databases/registers, which can be grouped as follows:

- Databases of quality-assured qualifications that are linked with the NQF, accessible and searchable online, notably via the website of the NQF institution.
 - The well-developed SAQA National Learners' Records Database (NLRD) (**South Africa**), which includes all qualifications of all sub-frameworks and levels, and part-qualifications is an exemplary system.
 - The **Kenyan** NQA is developing the NAQMIS, which will bring together the qualification-awarding institutions, the qualifications that they award and the learners.
 - The online national catalogues of qualifications of **Mozambique** and **Cape Verde** can be included in this group, as they are centralised and managed by the respective NQF institutions. These catalogues include only pre-tertiary vocational and technical qualifications linked with the NQF, organised in sectors (professional families).
- Listings and repertories of courses and qualifications under oversight of the different sub-systems (such as quality assurance agencies) and institutions (providers, universities, private and sectoral organisations), accessible online in yearbooks, lists and legal Acts of course authorisation. The mapping study found a range of different examples with these characteristics, such as in **Angola**, **Morocco** and **Senegal**.
- Catalogues and mappings of authorised, accredited courses and qualifications available upon request or without internet support (in printed publications). The case of **Cameroon** can be considered as an example of this category. The listing and main features of qualifications of the TVET system are recorded in databases, and in mapping reports, but with limited access. In higher education, the department in charge of university accreditations publishes regular and detailed mappings of all courses and qualifications in public and private institutions, but this valuable information is not accessible online.

Some types of qualifications databases provide structured and detailed information on the qualification profile and exit outcomes, associated units of competence, assessment criteria, credits and NQF levels. Others are briefer listings of titles of qualifications by sectors. In all cases, resource and capacity constraints determine the quality and completeness of these registers and databases, and the frequency of their updates. The mapping study found that some online qualifications registers are not fully up to date and do not contain information of the most recently approved qualifications. To ensure transparency and integrity of qualifications databases, some countries adopted specific legislation and methodological guidance, as in **Cape Verde**.

South Africa has a well-developed NLRD. SAQA is responsible for the NLRD, which is the management information system of the NQF and facilitates management and reporting on the national education and training system of the country (SAQA, 2020, p. 1). The NLRD includes the following records of education and training:

- › qualifications and part qualifications (including unit standards) registered on the NQF, their purpose statements, exit level outcomes and assessment criteria, and the NQF sub-framework allocated to each qualification and part-qualification;
- › the 12 organising fields and the sub-fields of the NQF;
- › recognised professional bodies and their professional designations registered on the NQF;
- › quality assuring bodies, including Sector Education and Training Authorities (SETAs) and quality councils, and the qualifications and part-qualifications for which accreditation has been granted;
- › accredited providers;
- › registered assessors; and
- › the records of learners who achieve qualifications or part-qualifications registered on the NQF, and their achievements.

According to SAQA, the NLRD provides decision-makers with comprehensive information about trends in education and training, and the labour market, with several such reports having been published over the last 20 years (SAQA, 2007, 2013, 2017). An important feature of the NLRD is the separation of the qualifications registers from learners' records, but in a relational manner. The early investment by SAQA made in the early 2000s to develop the NLRD as a sophisticated database has been recognised, and several SADC countries have started similar initiatives.

Angola's National Programme of HR Training aims to provide more efficient and complete information on the available education and training, to boost participation based on well-informed career choices. To this end, the UTG-PNFQ opted for an innovative technology-based solution and launched an app (Qualificar) integrating the totality of data on existing courses and qualifications, associated with search functions by levels, sectors, regions and institutions. Qualificar has been renewed and upgraded in March 2020 with new functionalities, and it stands as an innovative register of qualifications easily accessible by the wider public, especially young people.

This panorama of registers and databases of qualifications is changing. A number of countries are investing in developing and launching online searchable registers, with useful functionalities for end-users, and linked with other relevant databases. Morocco and Tunisia have ambitious

plans to establish modern repertoires of all qualifications, and Morocco will inaugurate a first complete online repertoire of TVET qualifications by the end of 2020.

Other countries with qualifications management systems may exist, but could not be identified during the mapping study. More attention and resources for this important instrument of any operational qualifications framework will be necessary in most countries and the ACQF might make a tangible contribution.

Interoperability of databases is a fundamental feature of modern information systems, which is not well represented in many of the identified cases. Of the cases identified by this mapping study, only South Africa has a well-developed information system with interoperable databases of qualifications and learner records, the NLRD. Sharing this experience could be motivating for most African peers.

Repertoires and registers of qualifications cannot be disconnected from taxonomies and classifications. In the mentioned examples, the linkage to various related classifications differs. Not all countries link qualifications with International Standard Classification of Education (ISCED) fields of education 2013 (UNESCO, 2013) or to the national occupational classification. This issue can be addressed in a harmonised manner at regional and continental level, and the ACQF could play a role.

An equally important dimension of qualifications management is the consideration of data privacy, specifically, data ownership. While many developing countries have tightened regulations on data privacy, Africa is lagging and this exposes the continent and member states to considerable risk. New thinking on digital identity (Dale-Jones & Keevy, 2020) could assist greatly in the design of the ACQF and its information management systems. While digital identity may seem far removed from African realities, this may very well also provide the ability to move ahead with the ACQF at speed, while simultaneously building on the latest technology. Further considering the trend towards increased automation, as has been mentioned a few times in this mapping report, perhaps also through the development of an African standard classification system, there is an incredible opportunity for innovation to be introduced through the ACQF process that will benefit all involved.

3.3.9 Monitoring and evaluation in the context of qualifications frameworks

Monitoring of NQFs and measurement of their contribution towards wider objectives are actions not often considered and organised early on. An increasing number of countries in Europe and other continents are undertaking reviews and evaluations of their NQFs. The **South African** NQF went through several evaluations underpinning structural transformations and a new legal basis. Discussions during the mapping study with NQF instances showed that the problem of monitoring and evaluation of NQFs is not underestimated and many countries welcome support to develop adequate tools and systems.

In some countries, such as in **Cape Verde**, the NQF legislation stipulates the obligation to monitor progress and measure impact. In other countries, the education law mandates the state to assure regular evaluation of the education and training system by specialised organs, such as in **Cameroon**. **Morocco's** National Council of Education Training and Scientific Research is entrusted and equipped with the resources to conduct regular evaluation of all sub-systems of education and training and other specific thematic analyses. In Angola, the UTG-PNFQ, which coordinates the NQF development process, has an important function of data collection and analysis to monitor programme achievements in all levels of qualifications and sub-systems.

Nonetheless, governments and socio-economic partners in Africa agree on the need to improve and better use information on demand and supply dynamics, employability, impact of mega trends (digitalisation, ecological transformation and events such as the Covid-19 pandemic) on skills and qualifications – seen as indispensable to improving matching and adjusting/reorienting qualifications systems. Today, this implies engaging in innovation to improve labour market intelligence: reinforce labour market observatories, explore the potential of existing and new data sources (internet and administrative, under strict data protection rules), interconnect databases and information systems, and use new visualisation tools and novel data analytics. The mapping study identified a number of labour market observatories working with different technical and analytical capacity, sometimes with very limited resources, in countries such as Angola, Morocco, Mozambique and Tunisia.

As mentioned above, an important consideration is the extent to which such qualifications systems interface with other national systems. The notion of data interoperability is actively being explored in South Africa (Shiohira & Dale-Jones, 2019) and in several international examples. The ACQF process would benefit from a closer scrutiny of these new developments in order to leapfrog many of the more traditional approaches prevalent across the world.

Considering the international trend towards the increased use of data for planning and recognition purposes, the lack of adequate systems in African countries and RECs is of concern. The development of the Continental Education Strategy for Africa (CESA) indicators as outlined in the CESA Indicators Manual (AUC, 2016) and discussed in Chapter 1, is a step in the right direction, but it remains unclear how effective this framework will be for the purpose of the NQFs and RQFs in Africa, and also the ACQF. While many countries may have well-developed labour market information systems, the interface with a centralised learner achievement system will have to be developed.

3.3.10 Non-formal and informal learning: Validation and certification

The role and place of non-formal and informal learning and of validation/recognition of prior learning is part of the third thematic dimension of this mapping study. A specific question was included in the online survey and a chapter in the country reports summarises information on the state of play of this policy area. The question in the online survey was: ‘How is non-formal and informal learning represented on the NQF?’ Approximately 70% of the responses indicate that non-formal and informal learning is considered in the context of NQFs in two ways: 1) the NQF integrates all forms of learning; or 2) through recognition of prior learning.

In international practice, this policy domain has been gaining visibility and affirmed its status in national qualifications systems and frameworks, through legislation, specific technical and methodological arrangements and tools, capacity development and research. In the EU, the 2012 Council Recommendation on validation encouraged member states to put in place national arrangements for validation by 2018. These arrangements enable individuals to increase the visibility and value of their knowledge, skills and competences acquired outside formal education and training: at work, at home or in voluntary activities. The implementation of this recommendation has been overseen by the EQF Advisory Group, supported by the renewed European Guidelines on validation of non-formal and informal learning and by the regular Inventory (biannual), research and peer learning, and most importantly by access to specific project funding. The evaluation report of this recommendation was completed in 2020.

Terminology and concepts matter in the diverse context of the African continent. Among the French-speaking countries, the term Validation des Acquis de l'Expérience (VAE) is widely used, and relates to documenting and assessing the knowledge, skills and competences developed through work and life experience against qualifications standards valid for other forms of learning (formal). Among the Portuguese-speaking countries, especially Angola and Cape Verde the predominantly used term is Reconhecimento Validação e Certificação de Competências (Recognition, Validation and Certification of Competence, RVCC), while in Mozambique there is a preference for the term Reconhecimento de Competências Adquiridas. In general terms, the meaning of RVCC and VAE is quite similar. In the context of English-speaking countries, the term RPL has general currency, but its meaning can have a different interpretation encompassing recognition of any form of learning.

The ACQF country reports found that VAE, RVCC or RPL has reached a differentiated degree of integration and visibility in education and training policies and in qualifications systems. In some countries, the qualifications policy framework is welcoming to non-formal and informal learning, and regulatory-technical implementation mechanisms and capacities are in place or in development.

In **Angola**, the establishment of the system of RVCC is defined in the National Development Plan 2018–2022 of Angola (PDN 2018–2022) as one of the key objectives of the SNQ. Two targets of the programme concern the operationalisation of RVCC, namely, the approval of the legal basis of RVCC and completion of 80 experiences of RVCC. INEFOP, the national institute of employment and professional training, is focused on coordination and provision of formal training programmes in line with Law 21-A/92. Some pilot experiments of RVCC processes have been tested, but were discontinued in the expectation of the approval of a new comprehensive and approach and methodology. Information on those experiments is scarce. The Law on Education 17/16 and the Law on Professional Training 21-A/92 do not refer to the validation of skills/competences/learning outcomes acquired in non-formal and informal contexts.

The Law on Recognition Validation and Certification of Competences (RVCC) of **Cape Verde** argues: 'People acquire, with their life experience, namely in professional activities, knowledge and competences relevant for the exercise of many activities. Those competences can and shall be formally certified, and, if necessary, complemented with training adjusted to individual needs, thereby promoting access to higher levels of qualification.' The Decree-Law 54/2014 of 22 September regulates the system of recognition, validation and certification of professional competences acquired and developed throughout life, in the context of work. In 2020, the UC-SNQ is developing additional instruments to be pilot-tested in the context of RVCC. Most importantly, the RVCC system in implementation is an integral pillar of the national qualifications system, jointly with other pillars such as the NQF and the National Catalogue of Qualifications, especially through the application of the learning outcomes approach. The primacy of learning outcomes in designing and assessing qualifications enables the access to qualifications by validation and certification of acquired competences. RVCC is defined in article 3 of the Decree-Law 54/2014 as the formal process enabling individuals to obtain the recognition, validation and certification of their competences, independently of the ways and contexts in which these competences developed. The law also defines the phases of RVCC processes over four phases, starting with information and guidance, followed by the recognition and validation of competences, and then the certification of competences. To support practitioners and implementation agencies, the UC-SNQ issued guidance materials, notably:

- › UC-SNQ, Guide supporting the operationalisation of processes of professional RVCC, March 2016.
- › UC-SNQ, Process of Recognition, Validation and Certification of Professional Competences, March 2013.

In terms of the **Kenyan** NQF Act, RPL means the consideration of knowledge, skills or competencies acquired through formal, non-formal or informal learning. In paragraph 11, section (1), the Act states: 'Subject to sub regulation (3), a person who has worked in any field of study may apply to the Authority for recognition of prior learning in Form KNQA/L/006 set out in the First Schedule.' Under section (2), the Act states: 'Where the Authority allows an application made under sub regulation (1), it shall issue the applicant with a Certificate of Experiential Learning in Form ICNQA/L/007 set out in the First Schedule.' Under section (3), the Act states

In considering an application made under sub regulation (1), (a) an applicant who does not hold a certificate may be eligible for admission to a National Qualifications Framework level or granted experiential learning equivalent to a qualification in the National Qualifications Framework level; and (b) an award of a certificate of experiential learning may be used by the awardee of the certificate.

In the informal learning sector, trade tests are used to certify artisans and craftspeople. The NQF will continue to use these existing systems of certification. The informal sector is well organised and keen for its members to be awarded qualifications through an RPL process.

In **Morocco**, the Strategic Vision 2030 for a School of Equity Quality and Promotion foresees the development of a comprehensive system of validation of learning outcomes from experience (VAE), noting: 'Adopt a unified system of validation of individuals' cognitive and professional achievements, overseen by an independent national body, where the various departments of education and training and professional sectors will be represented' (Levier 19, p. 70). In the past ten years, VAE has gathered some experience, based on partnerships of the Department of Professional Training (DFP) with sector federations and sector ministries, which carried out several VAE projects in sectors with a high demand for labour with qualifications. The VAE process is structured in four phases:

1. Information and counselling of the candidates: on the VAE process and its requirements, preliminary screening of the professional experience in view of the envisaged certification.
2. Admissibility: instruct the application file and decide on the eligibility.
3. Follow-up: support the candidate in the preparation of the Dossier of Description of Professional Experience and prepare for the process of certification.
4. Certification: the jury decides on the validation of the competences from professional experience on the base of the certification standard.

The NQF Permanent Commission is mandated to prepare the premises and legal-regulatory basis for establishing a functioning VAE system. This line of work will be fostered within the EU institutional twinning supporting the NQF, planned to start in late 2020. The Alphabetisation Agency offers validation of prior learning to beneficiaries in six specialised centres.

In **Mozambique**, the mapping study found that competencies acquired in non-formal and informal contexts are considered in the policy agenda. The four modalities of professional

training, Law 18/2018 on the National Education System (SNE), acknowledges the modality of extra-institutional training, that is, learning acquired outside of training institutions and schools. In complement, Law 6/2016 (articles 15 and 16) acknowledges the possibility of recognising and attributing value to learning acquired outside of formal training settings (institutions), under the condition that such learning is aligned with the competence standards of the QNQP. The QNQP validates and certifies learning obtained outside of training institutions and enables the access to regular courses offered by the formal training system. The conceptual and regulatory framework of recognition of acquired competences/RPL is in an advanced development and consultation stage.

Senegal has a VAE project in an advanced stage of implementation, although no RPL provision or mechanism has been put in place yet. As a stakeholder in the non-formal sub-sector, the vision of the Directorate of Literacy and National Languages is to see this sub-sector as a pillar of sustainable development with players who need visibility. To this end, the question of harmonisation of semantics on qualifications, certifications and validation of acquired experience (RPL) should be addressed, as well as the problems of coordinating interlocutors on RPL, according to the director. The Directorate of Literacy and National Languages has some RPL experience applied to literacy and non-formal facilitators with the support of UNESCO.

Since its inception, **South Africa's** NQF has made provision for the achievement of qualifications and part-qualifications through RPL and while the three quality councils must oversee the submission of RPL data for uploading in the NLRD, there are few sanctions for non-submission and only some entities submit these data. Since 2014 when the submission of the data became mandatory, SAQA has made systematic efforts to conscientise NQF stakeholders in this respect and to enable RPL data to be loaded into the NLRD. While it is known that there have been many more successful RPL cases than those recorded, the amount of RPL being submitted is increasing over time. At the time of writing, the number of learners who had achieved one or more part-qualifications via RPL was 87 915, with the records of achievements of part-qualifications via RPL numbering 1 610 956. RPL in South Africa is undertaken and awarded in a holistic way, which includes the principles and processes through which the prior knowledge and skills of a person are made visible, mediated and assessed, and requires the involvement of the full range of NQF stakeholders. Two main forms of RPL are distinguished, one to provide alternative access routes into learning programmes, professional designations, employment and career progression; and the other to provide for the awarding of credits towards a qualification or part-qualification registered on the NQF. The purpose of SAQA's (2019) RPL policy is to provide for the implementation of RPL in the context of the NQF Act – it positions RPL in relation to the overarching principles and priorities of the NQF in South Africa. The Ministerial RPL Coordination Policy (DHET, 2016) provides for the coordination and funding of RPL and elaborates and holds SAQA and the quality councils accountable to perform their roles in relation to RPL, as stated in the NQF Act. The Organisation for Economic Co-operation and Development (OECD, 2010c) study of RPL involving over 20 countries positioned South Africa in a cluster of five countries at 'Stage 5 of 7' – a country with 'islands of good RPL practices'.

3.3.11 Financing

The financing of qualifications frameworks is another area that was weakly reported on in the online survey and the technical field visits. Examples of donor funding were plentiful and some examples are listed below. What is evident from these examples is that many multilateral projects

have taken place in Africa over the last few decades, but these have lacked coordination and often led to duplication of effort. More concerning is the limited ability of countries to continue with such programmes after external funding is exhausted.

In **Angola**, the development and implementation of the unified SNQ, with operational instruments and a new functioning authority, are embedded in the PDN 2018–2022. Besides the public operational budget of the UTG-PNFQ, the SNQ coordinating organ, the technical development activities related to the SNQ are supported and funded by the EU project (Revitalização do Ensino Técnico e da Formação Profissional, RETFOP).

In **Cape Verde**, Decree-Law 7/2018 specifies in article 30 that the functioning and activities of the SNQ, including the NQF, are funded by the state budget. In addition, other sources, including from international cooperation, can be mobilised for specific projects. By legislation, the relevant public and private institutions, the IEFP and the professional orders (associations), have a duty to support the UC-SNQ in implementing the SNQ.

The focus group discussion conducted with representatives from the NAQAAE early in 2020 revealed that funding of the NQF in **Egypt** had been problematic in the past due to re-prioritisation of budgets.

The **Kenyan** NQA is located administratively in the state Department of Vocational Technical Training, with an annual budget allocation by Parliament through the Ministry of Education. Parliament appropriates funds to the authority for its running costs on an annual basis.

ANEP and the CNAQ, the lead institutions of the two sector qualifications frameworks in **Mozambique**, are financed by the state budget, with initial donor funding made available by the World Bank. Development of important technical and policy instruments are often co-funded by international partners, within their cooperation programmes coordinated by the government. Professional education has benefited from a range of projects contributing to the reforms in the last decade.

In terms of the Act, the **South African** Qualifications Authority may be funded by the state, donations, user charges, investments and other available sources. The Department of Higher Education and Training provides an annual grant from the fiscus to SAQA for streamlined responsibilities, and smaller revenue potential comes from fees for evaluation and external qualifications and targeted grants from donors. Funding for setting standards and quality assurance comes from SETA administrative budgets or discretionary strategic grant funds.

The government is promoting the operationalisation of the Public-Private Partnership Charter through the implementation of specific activities in **Togo**. In particular, it will prepare a standard partnership agreement and encourage the signing of agreements between training institutions and private enterprises with a view to enhancing training adequacy and links to employment, particularly in regard to internships, working conditions in enterprises for the implementation of work-linked training and the equipping of institutions. The French Development Agency and the German state funder, the GIZ, have undertaken to use the charter as a reference document for funding.

New innovative private-public funding models (De Witt et al., 2020), based on the achievement of key outcomes, are important to explore and have not been used in the context of qualifications frameworks before. The opportunity exists for the ACQF process to explore these new models, carefully mitigate risks and, potentially, open opportunities for national and regional programmes to be tested.

3.3.12 Dissemination and communication to end-users

It is a common trend across qualifications framework developments internationally that the end-users of the systems are not top of mind. While this approach may be explained to some extent by the abstract nature of the policies developed, it remains a weakness across the globe. Users such as learners, employers, education and training providers, career guidance advisors, employment and recruitment agencies ultimately need to find the qualifications systems useful and accessible, at least on the level that they interact with it. Responses to the online survey further emphasised this point, as very few countries communicate with learners, training providers, professional bodies and even employers. Segmentation between those bodies responsible for the management of qualifications frameworks from those that oversee implementation and the beneficiaries (Arnesen, 2010) is useful and provides a basis for ministries and qualifications agencies to develop stratified communication strategies. The early categorisation of qualifications frameworks as being reforming, transforming or communicating (Raffe, 2013) is also useful to keep in mind, and one would expect the latter category to have a much clearer focus on the end-user. The increased trend towards online platforms and the use of digital tools can further assist in this regard. Even the ACQF process to date has demonstrated the significant weaknesses in this area.

3.4 Mapping the RQFs in Africa

3.4.1 Introduction

RQFs do not necessarily follow the same logic in terms of legal and policy bases as NQFs. Regional examples reviewed in the mapping study include ECOWAS (UNESCO, 2013), where policy milestones aim at harmonising NQFs and future countries' endorsements of regional instruments. In the EAC (EAC, 2018; EAC & UNESCO, 2019), examples of discussion documents were found.

SADC was found to be the most advanced (SADC Technical Committee on Certification and Accreditation, 2018), with an overarching legal instrument that guides the development and implementation of the SADC RQF, namely the SADC Protocol on Education and Training (1997–2020). The protocol promotes the comparability of standards, mobility and portability of qualifications across the region in order to ease mobility of learners, workers and educational services. SADC recognises that migration and movement of persons for employment or education opportunities is inevitable in the integration and cooperation of the region. SADC policy instruments that support an appropriate environment of mobility of qualifications and free movement of labour include the Protocol on Facilitation of Movement of Persons (2005), not in force due to security concerns of SADC member states and the Labour Migration Policy Framework. The Labour Migration Policy Framework calls for 'the harmonisation and recognition of education and training, among others, to facilitate and manage migration in the region'. The Protocol on Trade in Services (article 7) 2012, updated in March 2017, calls for mutual recognition of qualifications for professional services.

In the EAC, a regional qualifications framework (EAQFHE) was adopted in April 2015, with a basis in the treaty establishing the EAC, and the Protocol on the East African Community Common Market (PEACCM). The EAQFHE specifically refers to article 102 of the Treaty of the EAC, which has four pillars of integration, one of which is Common Market Protocol. Article 102 of the treaty is mainly on the commitment to cooperate in education and training, thus the basis

for harmonisation and development of these regional frameworks. Article 11 of the treaty states that mobility of professionals within the East African community needs to be facilitated. To facilitate the mobility of professionals in the EAC, the partner states undertook to sign a mutual recognition agreement between competent authorities regulating the different professions. By 2019 mutual recognition agreements had been signed for accountants, architects, engineers and veterinarians. Negotiations of mutual recognition agreements for land surveyors and the advocates of East Africa have been concluded and were awaiting for signature at the time this study was completed. A study on effectiveness of mutual recognition agreements has since been undertaken. Sensitisation meetings for the mutual recognition agreement for pharmacists were set to begin. The negotiations for pharmacists commenced in 2017 and are ongoing.

Currently, nineteen countries are members of **CAMES**¹⁰, an intergovernmental institution for the harmonisation of policies and integration of the higher education systems of western and central Africa and the Indian Ocean. CAMES's activities are backed by a regional quality assurance policy, of which CAMES is the sole custodian for the harmonisation and integration of higher education systems in its space. This does not prevent member states from having their own quality assurance systems, backed by national policies and requirements. CAMES is a regional quality assurance and accreditation agency and oversees a programme of recognition and equivalence of diplomas¹¹. Of the nine current CAMES programmes, four are directly related to qualifications frameworks: 1) Programme Recognition and Equivalence of Diplomas (PRED); 2) Inter-African Consultative Committees (CCI); 3) Competitive examinations; and 4) Quality Assurance Programme (PAQ).

3.4.2 Governance and oversight of RQFs in Africa

Governance and oversight mechanisms for RQFs differ widely from those used for NQFs. As an example, the **ECOWAS** Commission, in cooperation with UNESCO, is proposing a new initiative to strengthen the capacities of ECOWAS countries for reforming qualifications systems while adopting a combined national and regional perspective. Experts and ministries of higher education are considering steps towards the development and implementation of a regional RQF body. Governance will entail setting up registers at regional and national levels for ease of reference. Stakeholders' involvement in the building of the ECOWAS RQF will be key in defining its vision, roles and functions, as will countries' networking. Prospects are good as ECOWAS policy on NQFs and the RQF has been one of the priorities of the ECOWAS ministers responsible for education since the 2002 ministerial meeting that took place in Dakar, Senegal, 2003, where two documents, the Protocol on Education and Training and its annex the Equivalence of Certificates were adopted and published. More recently, the ECOWAS ministers of education adopted the guidelines and roadmap for the ECOWAS RQF in October 2012.

In the **EAC**, the oversight responsibility for the coordination of the operationalisation of the Common Higher Education Area rests with the EAC Council of Ministers. The overall mandate over the implementation of the RQF is assured by the IUCEA, especially its Department of Quality Assurance and Qualifications Framework. The IUCEA is the custodian and governing body, delegated by the EAC. The key stakeholders of the EAQFHE are the higher education

10 Current CAMES members include: Benin, Burkina Faso, Burundi, Cameroon, the Central African Republic, Chad, Congo, Côte d'Ivoire, the Democratic Republic of the Congo, Equatorial Guinea, Gabon, Guinea, Guinea-Bissau, Madagascar, Mali, Niger, Rwanda, Senegal and Togo.

11 The register of African higher education programmes (degrees) recognised by CAMES is maintained [here](#).

bodies in the member states, and the respective ministries of education. Each EAC state will designate a national coordination point. The IUCEA's functions are to:

1. Bring together representatives from national authorities and other stakeholders to constitute an EAQFHE committee;
2. Lay the foundation for the establishment of a sustainable EAC qualifications management system;
3. Continue to create and build confidence in qualifications at national and regional levels;
4. Develop pathways structures that provide access to qualifications that contribute to skills and competencies;
5. Align the EAQFHE with international qualifications to enhance national and international mobility; and
6. Strengthen national regulatory framework and quality assurance for education and training for implementation at regional level.

Monitoring of the EAC RQF is being done by the IUCEA and reported to the EAC. The monitoring system uses a scorecard, which covers a number of actions that the EAC is undertaking and which are shared with representatives of the partner states.

As noted in the previous section, **SADC** has been developing an RQF for many years, overseen by the SADC Council of Ministers and ministers responsible for education and training. The Technical Committee on Certification and Accreditation (TCCA), the TCCA Executive Committee and an implementation unit (yet to be established) are the main governing structures for the implementation of the SADC RQF. The TCCA is a technical structure/advisory body made up of representatives of national certification, accreditation/national qualifications frameworks and systems in all member states, and representatives from regional and international technical partners and institutions such as UNESCO, the International Labour Organisation and the Southern African Regional Universities Association (SARUA). The TCCA is mandated to develop and recommend to SADC ministers responsible for education and training, regional policy guidelines, instruments, structures, procedures and related matters that would facilitate comparability, harmonisation, and the common understanding of accreditation and certification of qualifications to enhance mobility of learners and workers in SADC, as well as follow up on the implementation of the SADC RQF. In addition, it establishes thematic and sub-working groups of experts identified on the basis of their comparative relevance to the tasks to be undertaken for implementation of the SADC RQF as needed. Further, it establishes partnerships with regional, continental and international partners and institutions as technical resources for implementation of the SADC RQF. Currently, two sub-working groups have been established: the TCCA Executive Committee, to monitor progress and recommend remedial action for implementation of TCCA decisions between meetings, as well as the SADC Qualifications Verification Network (SADCQVN), which is a network of experts that verify national and foreign qualifications in all the SADC member states to promote quick, innovative and cost-effective verification of qualifications, building credibility and trust in the qualifications produced and used in the region.

With respect to the implementation of the LMD system, **CAMES** plays a role of support, advice and monitoring. It must, however, be noted that not all CAMES member countries are at the same level in the implementation of the LMD system – West African countries are more advanced than those in central Africa.

3.4.3 Scope of RQFs in Africa

In October 2012, the ministers of education adopted the guidelines and roadmap annexed to the UNESCO-supported report on development of NQFs and RQF in the ECOWAS region. The ACQF mapping report reveals the existence of five member states in the ECOWAS region that have developed and implemented or are in the process of developing an NQF. They are Nigeria, The Gambia, Senegal, Ghana and Cape Verde. In addition, over the years, many countries in the ECOWAS sub-region have developed policies and strategies aimed at strengthening their TVET institutions and skills development programmes. The acquisition of employable skills, particularly by youth, is seen as a prerequisite for entry into gainful employment and achievement of sustainable livelihoods. At the national level, a skilled workforce is an important driver of economic growth. TVET has therefore assumed some prominence on the human resource and economic development agenda in many countries in the region and in Africa as a whole. Regional cooperation of sectoral-specific scope on certification of professional competences has started, as illustrated by the regional certification scheme for sustainable energy skills, under the umbrella of the ECOWAS Centre for Renewable Energy and Energy Efficiency.

The first RQF to be developed by the EAC is the eight-level EAQFHE. This framework was developed in 2015 by the IUCEA, with funding from the Swedish International Development Cooperation Agency. The EAQFHE 'relates the EAC partner state national qualifications systems to a common EAC reference framework' (ACQF Mapping Study: EAC, 2020). It also claims to be an 'independent reference point', aiming to 'develop trust between the different stakeholders' in the region (Kerre, undated). Its stated purpose is that 'the EAQFHE provides the set of policies, objectives and information central to the organisation, management, implementation and monitoring arrangements for the qualifications framework'. It has been noted that from 2020 the EAC has embarked on a process of developing a TVET qualifications framework, with assistance from the Swiss Agency for Development and Cooperation and the World Bank. Plans are also underway for the development of a teacher education qualifications framework for the region (Jowi, 2020).

The SADC RQF was established as a ten-level reference framework in 2011 with a qualifications portal (currently not yet fully functional) and quality assurance guidelines:

The SADCQF is a regional mechanism for comparability and recognition of full qualifications, credit transfer, creation of regional standards and facilitation of QA. It consists of a set of agreed principles, practices, procedures and standardised terminology intended to: ensure effective comparability of qualifications and credits across SADC, facilitate mutual recognition of qualifications among Member States, harmonise qualifications, and create acceptable regional standards (SADC Secretariat, 2017b, p. 4).

The SADC RQF provides level descriptors for each of the ten SADC RQF levels based on learning outcomes with three domains of knowledge, skills, autonomy and responsibility. Its scope is based on the principle of inclusiveness encompassing all forms, types, levels and categories of education and training. This includes out of school, formal, non-formal and informal learning; general education; technical and vocational education and training; higher education and various modes of learning such as face-to-face, distance and online. The SADC RQF serves as a regional mechanism for comparability and recognition of full qualifications, credit accumulation and transfers, creation of regional standards and promotion of quality assurance within and outside

the region based on mutual trust. The purpose is to enable easier movement of learners and workers, and promotion of lifelong learning opportunities within the region and internationally. The ultimate aim is to ensure availability of relevant educated and skilled human resources for socio-economic sustainable development. The SADC RQF is intended to facilitate implementation of the *Revised convention on the recognition of studies, certificates, diplomas, degrees and other academic qualifications in higher education in African states* (Addis Convention), adopted on 12 December 2014 in Addis Ababa (UNESCO, 2014c). The convention establishes a legal framework for the fair and transparent evaluation of higher education qualifications in the African region to facilitate inter-university cooperation and exchange through the mobility of students, researchers and faculty.

3.4.4 Quality assurance and RQFs in Africa

Quality assurance at a regional level is notably different from that required on a national basis. At the ECOWAS regional level, efforts have been made to validate the ECOWAS Framework on Recognition and Equivalence of Degrees document and its benchmarks. Experts in the region also gathered to brainstorm the way forward with support from UNESCO and the Association of African Universities (AAU). The framework will offer a grid to analyse and recognise foreign qualifications at regional and national levels, with the collaboration of designated agencies and in alignment with continental instruments like the Addis Convention (UNESCO, 2014c) and the African Continental Free Trade Area (AfCFTA) (AUC, 2019b).

Quality assurance of qualifications in the EAC is done at different levels: at institutional level (universities, institutes of higher learning) and at national level through quality assurance authorities (Jowi, 2020). For example, for Kenya, the CUE is responsible for quality assurance and regulation of the higher education sector. There are similar agencies in the other partner states with similar mandates. For coordination and harmonisation of policies and practices, the IUCEA works closely with these agencies. Other levels of education such as TVET have different agencies responsible for quality assurance and regulation of the sector. Although the EAQFHE has no remit in the domain of quality assurance of qualifications, it works closely with the EAC Quality Assurance Framework, under the umbrella of the EAC Common Higher Education Area. The quality assurance system to promote comparability of education systems, enhance quality education and maintain international standards that would render the system competitive regionally and internationally has been mooted.

The SADC region is cognisant of the importance of a robust and effective system of quality assurance mechanisms in education and training provision to ensure trust and credibility of qualifications. The SADC RQF is supported by regional quality assurance guidelines, which set principles and standards for both internal and external quality assurance systems and mechanisms.

3.4.5 Referencing and alignment

The low number of responses to the question of RQF referencing/alignment in the online survey shows that the concept is not a priority for most countries, except for members of RQFs in the operational phase, such as the SADC RQF and the EAQFHE, which are more advanced in implementation:

- › NQFs of some SADC member states are reported to have been referenced to the SADC RQF (South Africa and Seychelles; Mauritius in advanced development).
- › One country (Kenya) reported that its NQF has been formally referenced to the regional qualification framework (EAQFHE). The EAQFHE is a generic instrument for the region upon which the partner states' national frameworks are anchored for the purpose of harmonisation and synchronisation of education and systems and qualifications attained in the community. The ten-level Kenyan framework, however, in practice, does not consider the regional framework, and the regional body for higher education (IUCEA) does not have the clout to 'enforce' referencing.

In 2016, the region, through the SADC TCCA, adopted alignment rather than referencing as a feasible methodology for linking and comparing the level descriptors of NQFs to those of the SADC RQF, due to the resource constraints (technical, financial and institutional) for implementation of the SADC RQF (SADC TCCA, 2017). Referencing requires a process that includes all stakeholders in both technical and social exercises that allow for the objective and external scrutiny of national education systems, thus requiring adequate resources (financial, technical and institutional) (SADC Secretariat, 2017b). A guideline for alignment that contains the alignment criteria and steps for the alignment process (self-assessment exercise) and adjudication process has been developed.

The alignment plan of NQFs to the SADC RQF consists of two phases, a pilot phase of countries and a roll-out to the rest of SADC member states based on their readiness. Peer learning and capacity building workshops are undertaken to assist the countries with the process. Eight countries (Botswana, Eswatini, Lesotho, Mauritius, Namibia, Seychelles, South Africa and Zambia) agreed to be part of the pilot phase of alignment of their NQFs to the SADC RQF in 2017. Angola, the Democratic Republic of Congo and Zimbabwe joined in 2019. As of June 2020, two member states, namely Seychelles (Seychelles Qualifications Authority, 2020) and South Africa (SAQA, 2020), have completed the alignment of their NQFs to the SADC RQF. Mauritius (Mauritius Qualifications Authority, 2020) has developed a well-advanced alignment report and the others are at various stages of aligning their NQFs to SADC RQF.

The EAC has taken a step-by-step approach, by first developing a framework for higher education qualifications. The realisation that a higher education framework needed to be linked to other qualifications led to the IUCEA developing a full eight-level qualifications framework. The IUCEA lacks the capacity and the status to market and implement the framework, so it remains a rather isolated initiative.

3.5 Analysis of a sample of level descriptors from NQFs and RQFs in Africa

In Chapter 2, following a specific review of the methodology used in the case of the SADC RQF level descriptors (Keevy et al., 2017), it was proposed that a wider sample of available level descriptors from NQFs and RQFs in Africa be reviewed in a similar manner. This section examines level descriptors from Cape Verde, The Gambia, Senegal, Egypt, Botswana, Morocco, Mozambique and Ghana, as well as from SADC and the EAC.

3.5.1 Qualitative review

The **Gambian** Skills Qualifications Framework (GSQF) consists of five levels of qualifications, the **Senegal** National Vocational Qualifications Framework (NVQF) has five levels of qualifications and **Ghana's** National Technical and Vocational Education and Training Qualifications Framework (NTVETQF) under the Council for Technical and Vocational Education and Training (COTVET) Act, has an eight-level framework tailored to the realities of its education system and labour force.

Cape Verde's NQF has eight levels that have been defined by descriptors, combining three domains of learning, knowledge, skills and responsibility and autonomy, and it is also inclusive and comprehensive, covering qualifications from basic, secondary and higher education as well

Table 24: Progression in the Cape Verde comprehensive NQF (extract of levels 1–4)

Level	Knowledge	Skills	Responsibility and autonomy
1	Basic general knowledge applied to a limited and defined set of activities.	Basic operational skills required to carry out simple and routine tasks.	Work or study under direct supervision in a structured context, with responsibility for his/her own performance.
2	Basic operational knowledge of a field of work or study. Expresses ideas and concepts through verbal communication and effective writing.	Basic cognitive and practical skills required to use relevant information in order to carry out tasks and to solve routine problems using simple rules and tools.	Work or study under supervision with some degree of autonomy. Demonstrate capacity to perform certain independent tasks in certain structured opportunities with intermediate levels of support and direction.
3	Knowledge of facts, principles, processes and general concepts, in a field of work or study, and with understanding of certain theoretical and technical elements of processes, materials and basic terminology.	A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information. Provides technical support to solve specific problems.	Take responsibility for executing tasks independently in an area of work or study when simple decisions or initiatives are required. Work effectively with others, as a member of a group and take limited responsibility for others in small teams and working groups. Requires support, direction and supervision in unknown situations. Adapt own behaviour to circumstances in solving problems.
4	Factual and theoretical knowledge in broad contexts within a field of work or study, relevant for the function.	A range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study. Manage own activity in the framework of established orientations in contexts of study or work, generally predictable, but susceptible to change.	Supervise the routine activities of third parties, assuming certain responsibilities in terms of evaluation and improvement of activities in contexts of study and work. Take responsibility for own outputs/results in work and semi structured learning situations. Work independently when immediate decisions are required with certain initiative. Define own objectives and targets in accordance with the goals of the organisation and effectively manage time.

as processes of validation, recognition and certification of competences obtained via non-formal and informal learning.

The ECOWAS Framework for Recognition and Equivalence of Certificates for Higher Education (see UNESCO, 2013) is brought into the analysis of West African countries for its relevance to university diplomas and post-secondary professional titles.

The Cape Verde NQF covers all types of education, training and qualifications, from school education to academic, professional and vocational, making it a comprehensive qualifications framework. This forcibly entails complex and multi-layer indicators or descriptors identifying expected learning outcomes for learning domains separately. The levels are then defined in their generic content, independently of economic sectors. If in the case of comprehensive frameworks, a distinctive handling of learning domains prevails, this approach may not match the reality of work or study context assessments where carrying out activities implies aggregating learning domains and demonstrating 'competence'. It means deploying a combination of knowledge, skills, aptitudes, methodologies, procedures and attitudes acquired by an individual that can be assessed in a given context (Charraud, 2012).

In the cases of NVQFs, they are presented as sub-frameworks, as in The Gambia, Ghana and Senegal. The language and engineering are not the same as in the EQF and Cape Verde. In Tables 25 and 26, level descriptors are tailored to describe vocational learning outcomes, and to focus more on competence¹². In other words, they are competence-based. Hence, level descriptors combine learning outcomes and competences, whereas competencies describe capacities to demonstrate acquisitions as a result of learning.

Table 25: Progression from level 1 to 4: NVQF cases of The Gambia and Senegal

Level	The Gambia	Senegal
1	Competence to perform a limited range of work activities while working under supervision, e.g. trained worker.	Corresponds to the qualification necessary for the exercise of a worker's professional activity demonstrating skills.
2	Competence to perform routine and some non-routine tasks under minimum guidance and supervision, e.g. skilled worker.	Corresponds to a qualification as a technician, which involves work carried out independently or involving supervisory and coordination responsibilities, requiring knowledge and understanding.
3	Competence to perform tasks associated with skilled jobs of routine and complex nature, sometimes with supervisory functions, e.g. team leader.	Corresponds to a qualification of higher technician with knowledge and capacities of higher level requiring the use of complex scientific tools, and supervisory skills.
4	Competence to perform management and analytical skills and/or specialist skills associated with jobs that are non-routine, e.g. middle manager/professional worker.	Corresponds to a qualification as a technician, which involves work carried out independently or involving supervisory and coordination responsibilities, requiring knowledge and understanding.

12 'Competence' means the proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development. In the context of the EQF, competence is described in terms of responsibility and autonomy. EQF

The interrelationship between learning outcomes and competences is best illustrated in **The Gambia** and **Senegal** qualifications frameworks, but they lack strength and clarity because the process of ‘hybridisation’ (Keevy & Chakroun, 2015) or combination lacks density to meet the requirements of a qualified person. According to the French Commission Nationale de la Certification Professionnelle (National Commission for Professional Qualification) definition, a person is said to be ‘qualified’ when he/she has demonstrated a set of knowledge, know-how and skills enabling him or her to perform a combination of activities in a broad professional context, at a defined level of responsibility and autonomy (Charraud, 2012).

The **Ghana** NTVETQF is characterised by the attempt to treat learning domains distinctively. Therefore, they tend to be quite detailed, because they will be used for a range of purposes related to the practicalities of employment, career planning, business management and human resource development. They are like summarised or generalised occupational standards or job descriptions. At the same time, level descriptors seem to exceed ‘partial’ qualifications frameworks designed to include only vocational or higher education qualifications, to reach the limits of international and meta frameworks such as the EQF (Raffe, 2009).

Table 26: Progression from level 1 to 4: Case of Ghana NTVETQF

Level	Qualification/ Status	Knowledge (i.e. enables learners to ...)	Skills and attitudes
1	Proficiency I/ Informal/Non-formal	-	Requires basic skills of trade and craft and the ability to perform routine and predictable tasks. Requires close supervision. Requires practical and oral tests for qualification.
2	Proficiency II/ Informal/Non-formal	Demonstrate basic numeracy, literary and IT skills: for example, carry out limited range of simple tasks of data processing.	Confirms competence in the handling of hand tools and machinery components. Requires performance of varied activities that are routine, predictable and non-complex in nature. Requires limited supervision.
3	Certificate I/ Formal	Demonstrate a broad knowledge base incorporating some technical concepts. Demonstrate basic numeracy, literacy and IT skills.	Requires a wide range of technical skills. Are applied in a variety of familiar and complex contexts with minimum supervision. Requires collaboration with others in a team.
4	Certificate II/ Formal	Demonstrate specialised knowledge base with substantial depth in area(s) of study. Analyse and interpret a range of data and be able to determine and communicate appropriate methods and procedures and outcomes accurately and reliably to deal with a wide range of problems.	Requires specialised knowledge of skill competence in different tasks in varied contexts. Requires wide and specialised technical and/or supervisory skills, which are employed in different contexts. Requires the ability to adapt and apply knowledge and skills to specific contexts in a broad range of work activities. Requires minimum supervision.

Finally, **ECOWAS’** efforts to endow the West Africa region with an RQF have been conclusive so far for the higher education sub-sector for the purpose of enforcing the LMD system, in which

qualifications are awarded mostly for satisfactory cumulative ‘learning outputs’, not for demonstration of learning outcomes. The LMD system is not structured so as to encompass the other tertiary diplomas awarded such as the Diplome Universitaire de Technologie, the engineering diploma and doctorates to practise medicine and health sciences (Guèye, 2019). However, the framework below compensates for this lack and fleshes out a comprehensive array of post-secondary qualifications.

Table 27: Framework for recognition and equivalence of certificates in the ECOWAS region

Qualification	Francophone system	Anglophone system	Lusophone system
PhD	Doctorat Unique/ Université (LMD) PhD in all fields including medicine, pharmacy, dentistry, etc	PhD in all fields including medicine, pharmacy, dentistry, etc.	Doutoramento in all fields Including medicine, pharmacy, dentistry, etc.
Professional qualification and not PhD	Doctorat médecine* Doctorat pharmacie* Doctorat odontostomatologie* Doctorat vétérinaire*	Medical doctors* Veterinary doctors* Dentists* Pharmacists,* etc.	Medical doctors* Veterinary doctors* Dentists* Pharmacists,* etc.
	Doctorat de 3eme Cycle**		
Master’s	Masters (LMD) Masters in all fields Ingénieur/Professional DESS for employment DEA for academic progression and teaching in the University	Masters in all fields (MA, MSC, LL.M, MBA, etc.)	Mestrado in all fields (MA, MSC, LL.M, etc.)
Bachelor’s	Licence (LMD) Maîtrise/DTS/ Ingénieur Technique	Bachelor’s degree in all fields: BA/BSc, LLB, HND, etc.	Licenciatura in all fields: BA, BSc, LLB, etc.
Intermediate	DUT/BTS/ DEUG, DUEL, DUES (2 years)	National Diploma, NCE or any equivalence (2 years)	Bacharelato (2 years)
Minimum entry requirement for higher education	Baccalauréat (General/ Technique/Professionnel	WAEC/O-LEVEL/WASC/ NECO/NABTEB/IJMB	Diploma de ensino secundário (12º ano)

Source: ECOWAS Experts’ Meeting Report, Lomé, December 2019

Notes

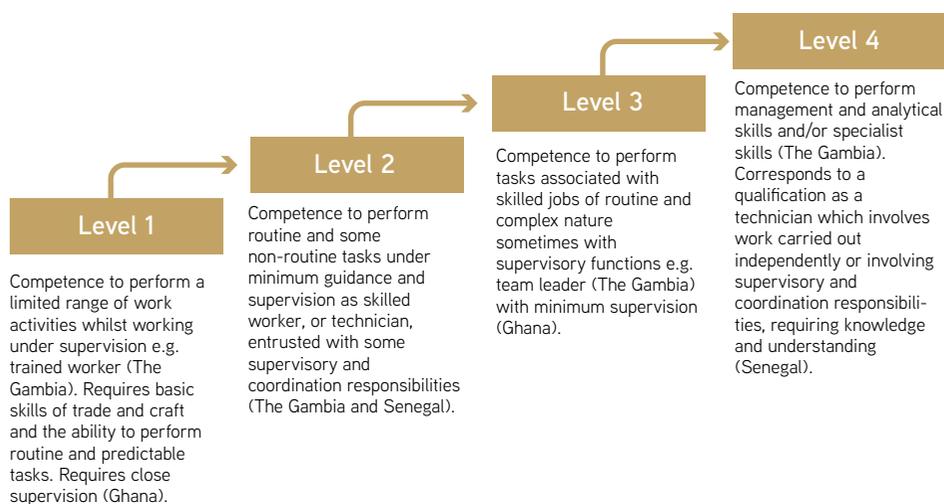
* These doctorate degrees are professional courses and not equivalent to the PhD. Additional courses need to be taken to obtain academic doctorates.

** *Doctorate de 3eme Cycle* has been replaced by *Doctorate Unique* due to LMD reforms. It is a subject of debate since it is said to be lower than a PhD but higher than a Master’s degree. It was therefore agreed that it is not a formal PhD.

Convergences clearly stand out in setting NVQF level descriptors. They stem from the fact that all studied countries tie competence levels to the degree of autonomy and responsibility an individual is expected to demonstrate as a result of having acquired a qualification at a particular level. In the event, supervision breadth ranges from maximum to minimum, as more and more autonomy and responsibility are granted to the individual.

Autonomy and responsibility are not expected from, nor granted to level 1 individuals. They are just 'trained workers' under 'close' supervision. Supervision diminishes as qualification levels increase. Additionally, level descriptors reflect competence rising to match tasks' growing complexities, and requiring increasing autonomy, responsibility and accountability, as shown in Figure 12.

Figure 12: Progression in competence and autonomy across levels



Divergences in language and across level descriptors used in different types of qualifications frameworks result in differences in the way learning outcomes are defined and described. In Senegal, The Gambia and Ghana, skilled learning levels are described in a similar way and learning domains are variably dealt with. The Ghanaian NTVETQF is structured to accommodate academic knowledge and occupational skills acquisition, whereas Senegal and The Gambia place the emphasis on competence. The principle of levels hierarchy is observed across the countries and the use of the concepts of knowledge, skills and competence in the level descriptors aligns with international trends:

The prominence of the term 'skill' in international education and training discourse reflects trends in linking education and training systems with the labour market, and the policy focus on employability (Keevy & Chakroun, 2015, p. 41).

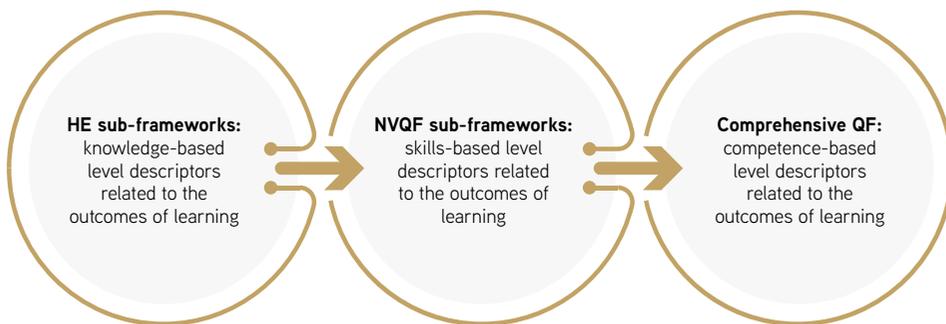
The analysis of the four NQFs in the ECOWAS region illustrates an emerging trend in setting level descriptors for national vocational qualifications frameworks. They are competence-based and call for workplace and position considerations. They also attempt to respond to socio-

economic imperatives. Their substance and engineering call for social dialogue between all stakeholders, including the labour world and workers' representatives by virtue of countries' contexts and orientation laws. These laws aim to promote TVET, as is the case in Senegal with the 2004-37 (2004) Act that 'takes into account both skills acquisition as a result of demonstration of learning outcomes and meeting labour market demand'.

Level descriptors nomenclature, range and engineering build up into defining outcomes of learning, whatever the mode or context of learning, on the one hand. On the other hand, level descriptors set benchmarks against which various learning outcomes can be assessed. There arises the complexity of level descriptors in trying to reflect the combination of different learning domains, mostly knowledge, skills and competence when they set out to be competence-based. The aggregate nature of competence may not be sufficient to make up and render all knowledge and skills learning acquisitions applied in context. That is where the weakness lies to a certain extent as far as the Senegal qualifications framework is concerned and to a greater extent in analysing The Gambian one.

Figure 13 indicates three types of qualifications, depending on their propensity for either learning domains in setting level descriptors (knowledge-based or skills-based), or on how the domains blend (competence-based): 1) higher education sub-frameworks; 2) NVQF sub-frameworks; and 3) comprehensive qualifications frameworks.

Figure 13: Three types of qualifications frameworks and their learning domains



Each one of the above-mentioned frameworks has its strengths and weaknesses. In higher education 'academic' sub-frameworks, the hierarchy of diplomas, degrees and titles considerations supersede those of competence-based learning outcomes. Should the reverse occur, diplomas and degrees are labelled 'professional'. NVQFs like those of The Gambia and Senegal lack density to fully carry the aggregated nature of competence as defined by the EQF Glossary. Ghana is a typical example of a comprehensive NTVETQF catering for academic, professional and occupational contexts. Finally, with regard to generic and comprehensive qualifications like the EQF and the Cape Verde NQF, although their competence-based level descriptors relate to the outcomes of learning, they categorise learning outcomes according to learning domains. This approach may reduce the competence all-encompassing position in engineering and implementing qualifications frameworks, although it provides a set of constructs against which the unit 'learning outcomes' and 'assessment criteria' expectations can be compared, as said earlier. Another possible caveat that may stem from comprehensive frameworks like the Cape Verde NQF and the EQF relates to sub-sector qualifications frameworks interlinking with or referencing to them to support their development.

The present analysis reveals emerging trends and new approaches in developing NQFs in the countries studied. The language, nomenclature and engineering of level descriptors differ from one country to the other, as indicated earlier. Ghana's blended academic-technological and vocational NTVETQF may place excessive demands on standards setting and assessment processes. All things considered, the more qualifications frameworks are competency-based, the greater the effort to set level descriptors that reflect outcomes of learning. The trend appears to be typical of technical and vocational qualifications frameworks. Limitations occur at two levels, firstly in handling learning domains and secondly in defining the scope.

3.5.2 Analysis of level descriptors based on progression across domains

Analysis of level descriptors	Description	Analysis of level descriptors
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In this section we have adapted the methodology described in Chapter 2 to analyse level descriptors and applied this to a selection of countries, and also to the SADC RQF and EAQFHE. The methodology is premised on the application of three taxonomies (Revised Bloom, Structure of the Observed Learning Outcome [SOLO] and the Dreyfus Model of Skills Acquisition) to three commonly used domains (knowledge, including a cognitive dimension, skills and competence). In the initial application in 2017, as part of the SADC RQF study (Keevy et al., 2017), a grid was developed for each domain and a smooth line was fitted to each of the grids. In this way, the SADC level descriptors were compared with both other regional descriptors (the EQF and AQRF) and a selection of national descriptors (from South Africa, Botswana and Lesotho). The result was a set of mappings, as presented in Chapter 2.

On the following pages, we present an initial analysis of a selection of national and regional level descriptors using the same methodology, but slightly adapted to allow for more consistency and also better comparison across the case studies. The cognitive dimension of the Revised Bloom Taxonomy was also excluded because its application proved more difficult and inconsistent. Further development of the methodology should consider greater automation of the data capturing, and perhaps also the inclusion of statistical methods to check for validity and reliability. We return to this point in Chapter 5.

Figure 14 (see p. 132), which presents an analysis of level descriptors from a selection of NQFs in Africa (Cape Verde, Egypt, Botswana, Mozambique, Senegal and Kenya), points towards some interesting observations.

Knowledge domain (blue graphs):

- Most NQFs focus strongly on factual knowledge in their first levels, but some introduce conceptual knowledge earlier, such as in Senegal.
- On the other extreme, the introduction of descriptors at the metacognitive level in the highest NQF levels is not consistent – for example, Kenya focuses exclusively on this area, while Cape Verde and Mozambique retain a distribution of knowledge dimension in their highest NQF levels.
- Across the levels, the charts demonstrate a gradual shift towards higher knowledge levels.

Skills domain (brown graphs):

- › Similar to the knowledge domain, the level descriptors show significant variance across the SOLO levels.
- › Senegal stands out, with many SOLO levels captured within each NQF level .

Competence domain (green graphs):

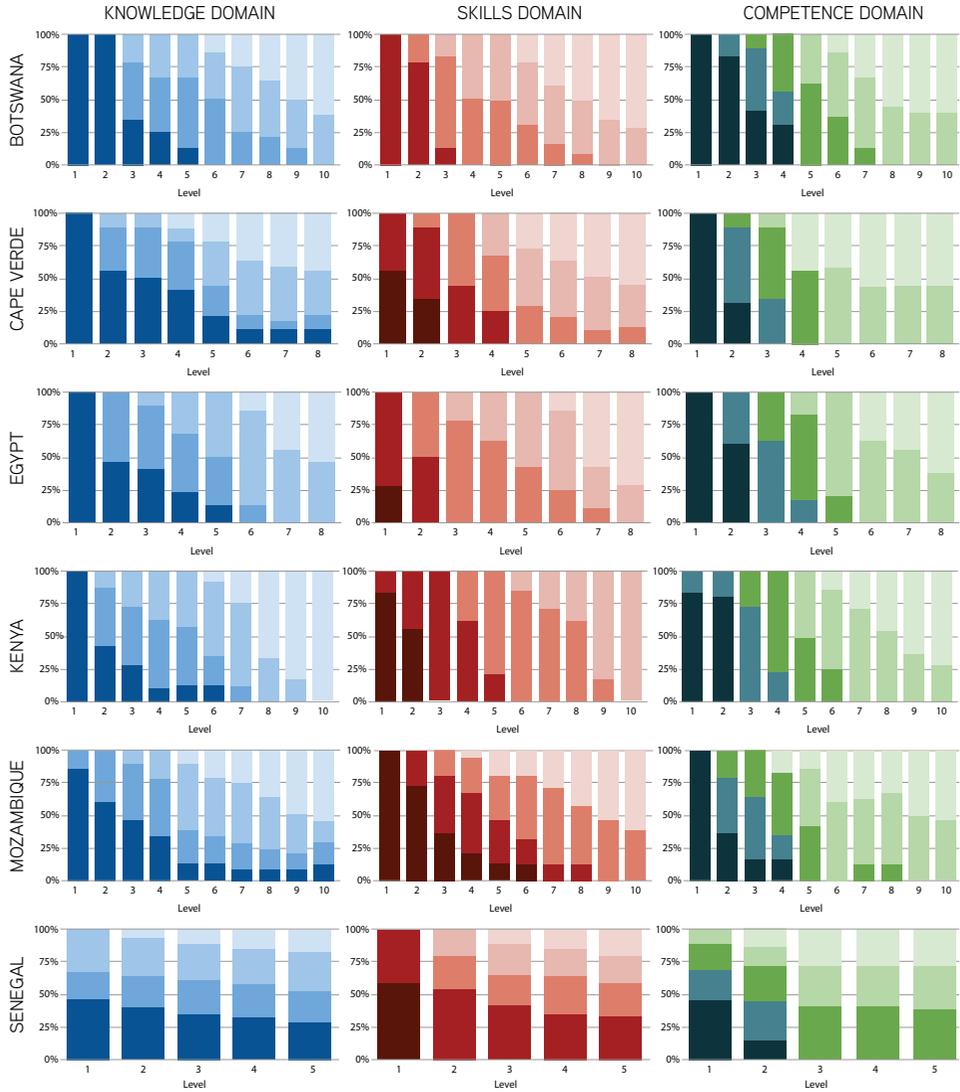
- › Again, the analysis allows for a side-by-side view of the Dreyfus levels within the level descriptors of each NQF.
- › Most NQFs show a very strong alignment between NQF level and the Dreyfus taxonomy, and again Senegal stands out as an exception.

This exercise points towards the potential wider application of the methodology. A more automated approach using algorithms could be explored and, once in place, this could enable more consistent analysis of descriptors during referencing processes. At the very least, the exercise should be done in a more reliable manner, using several experts.

Cape Verde's set of level descriptors looks straightforward to analyse, given that its structure aligns with the two generally admitted learning domains – knowledge and skills – while the third domain – responsibility and autonomy – has elements of competency. The analysis below draws on the application of different taxonomy templates to the level descriptors. Learning outcomes pertaining to the knowledge domain, including its cognitive dimension, through the lens of Bloom's Taxonomy, cover all the range of the taxonomy components. Knowledge acquisition hierarchy is transparent, starting from basic and factual knowledge to metacognitive knowledge in generic terms and aligns horizontally with levels of learning. The SOLO taxonomy, applied to the skills domain, emphasises skills demonstration, but importantly, brings out the cognitive layer that underpins every learning process. Both culminate in a competence hierarchy, as autonomy and responsibility increase. Finally, the Dreyfus Model of Skills Acquisition, applied to Cape Verde's level descriptors, depicts most clearly their competence levels and focuses on skills demonstration and the expected degrees of responsibility and autonomy attached to progression in competence at each level of learning.

Ghana exhibits a typical set of TVET reference NQF level descriptors. The knowledge domain makes no provisions for level 1, while learning outcomes are expected as far as skills acquisitions are concerned. This is revealing of the assumption that basic skills of trade and craft in non-formal and informal sectors are deprived of knowledge, which may impede lifelong learning processes and opportunities. Skills and competence domains are combined, highlighting expected learning outcomes at each of the eight levels, with degrees of responsibility and autonomy attached to progression in competence at each level of learning. SOLO taxonomy and Dreyfus Model templates capture perfectly the competence progression at each level of learning from novice to expert and how the skills structure builds up and plays out. At the expert level, there seems to be a balance between the four knowledge components – the factual, the procedural, the conceptual and the metacognitive (cf. Ghana knowledge chart) – which remains to be explained.

Figure 14: Analysis of level descriptors from a selection of NQFs in Africa (Botswana, Cape Verde, Egypt, Kenya, Mozambique and Senegal)



Key

Knowledge	Factual	Conceptual	Procedural	Metacognitive	
Skills	Pre-structural	Uni-structural	Multi-structural	Relational	Extended abstract
Competence	Novice	Advanced beginner	Competent	Proficient	Expert

Senegal's NQF shows five level descriptors. The three generally admitted learning domains – knowledge, skills and competence – have not been treated distinctively. Learning outcomes at each level are competence-based, referring more to levels of qualification as a result of training. As the nomenclature does not delineate learning domains, comparative analysis falls into assumptions that learning domains are embedded in each level descriptor. Nevertheless, these multi-layer and condensed level descriptors are easy to analyse through the SOLO taxonomy and Dreyfus Model lenses. The expected degrees of responsibility and autonomy attached to progression in competence at each level of learning come out clearly enough. However, Senegal's NVQF level descriptors may need refining.

The knowledge, skills and competency dimensions in the **Botswana** and **Kenya** level descriptors were best analysed through Bloom's Taxonomy, SOLO and the Dreyfus Model, respectively. The pre-structural level in the SOLO taxonomy could not be applied to any of the level descriptors because it did not seem appropriate to review even the lowest level (level 1) as incompetent/fail.

In **Cape Verde**, **Mozambique** and **SADC** the knowledge and skills dimensions were best analysed using Bloom's Taxonomy and SOLO. The pre-structural level in the SOLO taxonomy could not be applied to any of the descriptors because it did not seem appropriate to review even the lowest level (level 1) as incompetent/fail. The Dreyfus Model was used to analyse the dimension of responsibility and autonomy, as this was the model used to analyse the competency dimension, and responsibility and autonomy were viewed as competences.

Level descriptors of **Egypt** were analysed using Bloom's Taxonomy for the knowledge dimension, and SOLO for the cognitive and professional skills dimension. The pre-structural level in the SOLO taxonomy could not be applied to any of the level descriptors because it did not seem appropriate to review even the lowest level (level 1) as incompetent/fail. The autonomy, responsibility and interaction competencies were best reviewed through the use of the Dreyfus Model.

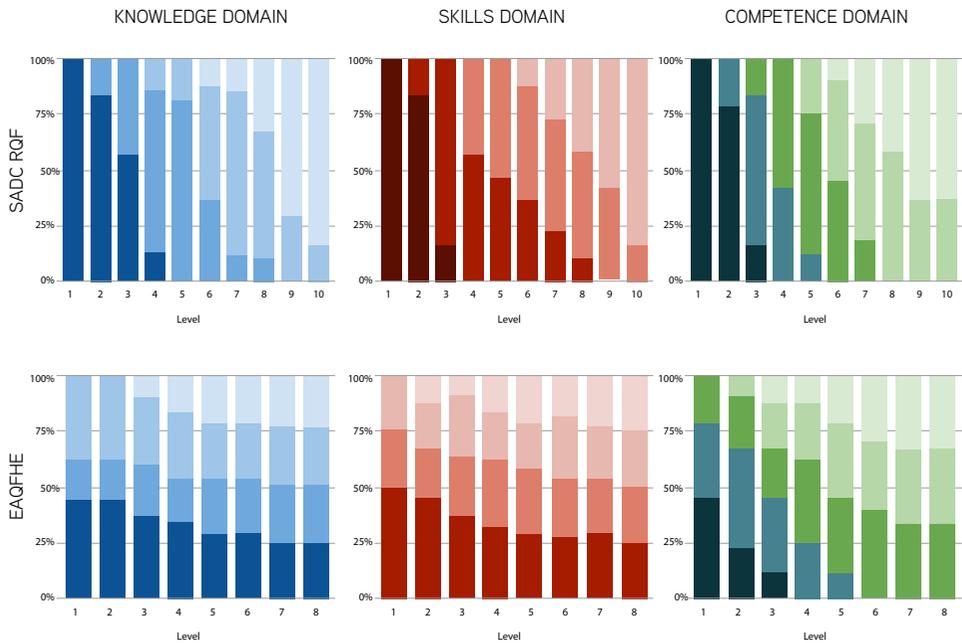
The analysis in Figure 15, which follows the earlier example of the analysis of the level descriptors of NQFs, shows similar variances between the SADC and EAQFHE level descriptors across the knowledge, skills and competency domains. Of course, it will also be possible to compare level descriptors from an NQF with those of an RQF, something that could be useful during a referencing/alignment process. As pointed out earlier, the validity and reliability of such analysis could be improved using a more automated approach. Such an approach could be further developed in the ACQF process.

The EAQFHE's set of level descriptors is characterised by a pressing demand on cognitive/analytical and practical skills as knowledge acquisitions increase. Its structure does not quite match the three generally admitted learning domains of knowledge, skills and competence, although they underpin the engineering of the four domains of learning outcomes that are fleshed out: Development of Knowledge and Understanding; Cognitive and Intellectual Skills; Key/Transferable Skills; and Practical Skills. The analysis through the application of different taxonomy templates to the level descriptors reveals that learning outcomes pertaining to the knowledge domain, including its cognitive dimension, through the lens of Bloom's Taxonomy, cover all the range of the taxonomy components. Due to the nomenclature of Development of Knowledge and Understanding AND Cognitive and Intellectual Skills, the knowledge acquisition hierarchy does not come out clearly. Furthermore, the novelty consisting in connecting ethical issues to knowledge remains to be discussed. The SOLO taxonomy and the Dreyfus Model of Skills Acquisition templates applied respectively to the Key/Transferable Skills and Practical

Skills domains reveal some limitations in the engineering of the level descriptors. The line between ‘Intellectual Skills’ and ‘Transferable Skills’ is blurred, as is that between ‘Transferable Skills’ and ‘Practical Skills’. This splitting of the skills domain results in lengthy and repetitive expected outcomes of learning and eclipses the competence hierarchy, as autonomy and responsibility increase at each next level of learning. The EAQFHE level descriptors reveal a comprehensive and reference RQF that may need reviewing for more concision.

While each level of the level descriptors from Botswana, Cape Verde, Egypt, Kenya, Mozambique and SADC could not all be associated to a specific level on different taxonomies used to analyse the level descriptors, an attempt was made to rate each level descriptor using a rating scale of 0 to 5, where 0 represented no alignment and 5 good alignment. This enabled researchers to judge how well aligned each level of the specific taxonomy (Bloom, SOLO or Dreyfus) was to each level descriptor.

Figure 15: Analysis of level descriptors from the SADC RQF and EAQFHE



Key

Knowledge	Factual	Conceptual	Procedural	Metacognitive	
Skills	Pre-structural	Uni-structural	Multi-structural	Relational	Extended abstract
Competence	Novice	Advanced beginner	Competent	Proficient	Expert

3.5.3 Observations

This analysis of a sample of level descriptors from NQFs and RQFs in Africa is important for the future ACQF. While the methodology has not been applied widely internationally, there is a growing interest for a more scientific approach to the development of level descriptions and, as a result, also for the comparison of level descriptors across countries and regions. As mentioned, this more refined approach could enable improved comparison between qualifications frameworks and therefore also be used in the referencing/alignment process. An understanding of this process could also assist countries to develop their NQFs more in line with the meta-frameworks they intend to reference.

3.6 Analysis of a sample of African qualifications

In Chapter 2 of this mapping report, it was proposed that a set of agreed criteria was used to select a sample of qualifications from African countries that can be matched to ESCO and presented as qualifications profiles, similar to the process followed by CEDEFOP in 2017 (Bjørnåvold & Chakroun, 2017). Following the application of the criteria, three qualifications were initially selected:

- hotel assistant (tourism sector, certificate or diploma level, offered by colleges or employers);
- accountant (financial services sector, first degree level, offered by tertiary institutions);
- coding (ICT sector, non-formal level, offered by online providers).

During the mapping study, qualifications for a hotel assistant were explicitly not found, and were subsequently replaced with qualifications that are common in the hospitality training sector and reflect broad training in hospitality services at certificate level (commonly level 3 or 4 in the NQF). In the case of qualifications for an accountant, it was found that first degree courses in accounting were not common. The usual pathways of learning accounting are a choice between professional qualifications (usually internationally accredited) and a bachelor's degree in commerce with an accounting option. Rather than comparing mostly international professional qualifications in accounting or reviewing only a specialisation in a broad commercial degree, a choice was made to compare the Diploma in Accounting courses, often taught at universities and higher education colleges. The third example selected was teaching coding, which is done through various charitable and commercial initiatives, from bootcamps to formal IT modules. A relevant South African study, comparing coding training initiatives, which were similar across several African countries, was relevant as it considered the coding training in the context of skills shortages and empowerment of disadvantaged groups. Table 28 summarises the selected qualifications.

The following information was sourced for the selected qualifications: formal qualification documents on websites; supporting curriculum available on websites; and supporting documents, such as assessment standards, learning guides, and so on, mostly found during in-country visits. Due to travel and communication restrictions from early 2020, information from countries other than from websites was not obtained. Planned in-depth information on hospitality qualifications from Kenya Utalii College was overtaken by the sudden closure of the College in early 2020.

Table 28: Sample of African qualifications selected for the development of qualifications profiles

Country	Qualifications		
	Hospitality	Accountant	Coding
Kenya (5 qualifications)	Certificate in Front Office Operations, Kenya Utalii College. Catering and Accommodation Operations, Nairobi Institute of Business Studies, Prudential International School of Professional Studies and other providers.	Accounting Technicians Diploma (ATD), KASNEB	Coding, Digikids and @iLabAfrica, Strathmore University Coding workshops, Pwani Teknogalz
South Africa (11 qualifications)		Accounting Technicians Diploma, UNISA 83289	WeThinkCode, Umuzi, Project CodeX, CodeSpace, Quirky30, CapaCiTi, Tshimologong Skills Academy, HyperionDev, mLab CodeTribe, Code College
Botswana (1 qualification)			Learn to Code Botswana
Namibia (3 qualifications)	Certificate in Hospitality Operations, Namibia University of Science and Technology (NUST)	Diploma in Accounting, University of Namibia (UNAM). Diploma in Accounting and Finance, International Training College Lingua.	
ESCO Qualifications Profile	Hospitality establishment receptionist 4224.1	Bookkeeper 3313.2	ICT application developer 2514.2

The comparison of qualifications considered local/national contexts, continental/international contexts, as well as the relationship between the qualifications and specific occupations (see Chapter 2). This included an initial attempt at developing a qualifications profile using ESCO for each.

ESCO analysis grid	Description	ACQF Qualifications Profiles
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3.6.1 Hospitality

In **Kenya**, the tourist and hospitality sector is well developed, and employment opportunities in the sector are many. Many public and private training providers offer hospitality courses. Some training providers, public and private, also act as accreditation bodies to other providers who want to use their courses. The analysis covered two hospitality qualifications in Kenya at level 3 or 4 of the Kenyan NQF: 1) Catering and Accommodation Operations from the NIBS Technical College, also offered by commercial training institutions across Kenya, and 2) Front Office Operations offered by the (now defunct) national hospitality training provider, the Kenya Utalii College. The NIBS qualification is assessed by the Kenya National Examinations Council, while the Utalii assessment is in-house, in line with its status.

The Kenyan qualifications analysed were not stated in terms of competencies as occupational or learning outcomes. The statements on the career path and objectives of the NIBS qualification are formulated in a manner to sell the course, which may be because the course owner is a commercial institution. However, the learning and employment outcomes that can be derived from the course information are available and are similar. In terms of competencies that can be acquired, the Utalii qualification is broader than the NIBS qualification in terms of scope, and includes learning on languages, human relations, accounting, and so on.

In **Namibia**, the Namibia University of Science and Technology (former polytechnic) offers a one-year Certificate in Hospitality Operations at level 5 of the ten-level NQF. This qualification in hospitality is a one-year programme of 124 credits. For certificate qualifications, the minimum volume of credits is 40 NQF, 1 credit being 10 notional hours. The course allocated a large amount of time to workplace learning, in the form of compulsory internships. It is a certificate qualification at level 5, but more basic and narrower than the Kenyan qualification.

The **Kenyan** National Skills Certificate in Housekeeping and Accommodation, Qualification Code 101103T4 registered at level 3 of the ten-level NQF with 53 credits (530 hours, maximum one year of training) is a third hospitality qualification in Kenya, offered mainly in TVETA centres. This course is limited to a narrow range of occupations (housekeeping) and thus its competency outcomes are formulated to that end.

The selected hospitality qualifications show a poor match with the selected ESCO hospitality qualification in the area of customer service and in the areas of proactive promotion (marketing, selling) of tourism and hospitality services.

- Customer service in terms of anticipating and identifying needs and wishes of customers, and proactive responding to those, as well as learning from customer experiences (positive and negative) did not feature in the Kenyan, Namibian and Mozambican hospitality qualifications. The topics in the African qualifications were, however, described in very general terms, so elements of customer service may be taught under those general topics or be assumed to be learnt during hospitality internships.
- The role of services employees in the promotion of tourism and hospitality services to enhance the business performance is another element that was not reflected.
- Health, hygiene and safety did not specifically feature in the African hospitality qualifications, which doesn't necessarily preclude learning on these important elements.

- › In all qualifications, basic and higher-level learning outcomes exist alongside each other. Learning outcomes that would be responding to higher-level descriptors were not common.

Figure 16: Match of a sample of national hospitality qualifications profiles to ESCO



3.6.2 Accounting

Accounting qualifications may be developed and accredited by professional or sectoral bodies. These qualifications may then be located on a sectoral framework. Many NQFs are still under development, as the social dialogue required for an NQF, rather than a sectoral one, based on level descriptors being used across sectors, has not been advanced. In **South Africa** such dialogue has been ongoing for over 20 years. In most other countries, however, the professional/sectoral qualifications exist in parallel with national qualifications. It is adding value to the qualification if it is both nationally and sectorally accredited.

In the cases of **Namibia** and **Kenya** qualifications frameworks exist. Accounting qualifications have been developed by institutions and then registered on the framework. In the case of Kenya, as in some other countries, qualifications may also be developed by a body charged with the development of outcomes-based national qualifications. An accounting qualification will then be registered on the national framework. As with other qualifications developed by a national body for developing qualifications, these accounting qualifications may or may not be 'utilised' by training providers. In the case of Namibia, parallel accounting qualifications developed by training providers have been registered on the framework, so a qualification may be registered but not be national.

Qualifications at the same level between countries may differ a lot as to the purpose and the career focus of the qualification. For example, the qualification from Namibia University of Science and Technology seems to focus on public accounting, preparing accountants for local and national government functions, while the South African and the Kenyan qualifications include entrepreneurship and preparing young people to start a business. In this sense the qualification may be more or less responsive to the employment needs and perspectives for graduates.

Except for the **South African** qualification, none of the accounting qualifications is based on learning outcomes. On reflection, the selection of these qualifications could have been avoided, although it is interesting to notice that sectoral qualifications are not necessarily well elaborated as far as learning outcomes are concerned.

According to the Director of Quality Assurance of the KNQA, the **Kenya** education and training sector is in the initial stages of a transition period from the old system to the competency-based curriculum. The transition to formulating learning outcomes that describe the desired competencies is key to this process. Since accounting qualifications have a long history of accreditation, they wouldn't be prioritised to be 'translated' into learning outcomes. This would rather be the case for courses (or curricula) that were known to be outdated, and which would have lost their relevance for the labour market (such as construction or IT).

For accounting qualifications, assessment would be a written examination in all cases, as accounting skills can hardly be assessed otherwise. Due to the historical strength in setting clear standards for accounting training, this is expected to be reflected for new qualifications as well. In the countries considered in this comparison of qualifications, assessment and certification have not been fully rationalised and clearly regulated, although South Africa stands out in this regard. A wide range of examination and assessment approaches is applied and many bodies are involved.

As with assessment, certification has not been fully rationalised and clearly regulated in the countries considered in this comparison of qualifications, although South Africa stands out in this regard. In Namibia, the national qualifications authority is rather well established, as is SAQA and its related bodies in South Africa, so certification of qualifications is more regulated, while in Kenya the KNQA is still finding its feet, introducing the competency- or outcomes-based approaches during 2020.

The **South African** NQF has the most elaborate level descriptors of relevance to this exercise. Other frameworks are rather brief on describing the skills at each level of the framework, thus providing less guidance for qualification developers and leaving more allowance for 'qualification inflation'. Level 6 in the ten-level South African framework is very distinct from its neighbouring levels 5 and 7, and thus prevents 'qualification inflation'. Level 6 considers scope of knowledge, knowledge literacy, method and procedure, problem solving, ethics and professional practice, information skills, communication skills, context and systems, management of learning and accountability.

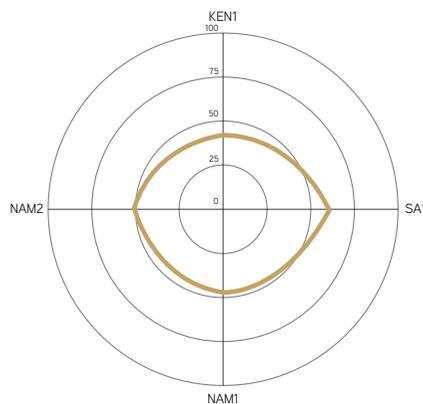
The level descriptors of level 6 in the ten-level **Kenyan** framework consider the categories of purpose, knowledge, skills and competence. The level descriptors are clearly less elaborate and encompassing less elements of learning and post-learning performance. The location of qualifications on a specific level (in this case level 6) may thus become more arbitrary and the learning outcomes may vary between qualifications of the same level.

The following higher education accounting qualifications from three countries were compared: Diploma in Accounting and Finance, International Training College Lingua, Namibia NQF ID

Q0176 7; Diploma in Accounting and Auditing, UNAM, Namibia; Accounting Technicians Diploma, UNISA South Africa SAQA ID 83289 Qualification Code 98200; Kenya National Qualifications Framework National Diploma in Accounting, TVETA. All four qualifications require a certificate level qualification in the accounting field as entry requirement. The qualifications are pegged at level 6, with one at level 7 of ten-level qualification frameworks. The course duration ranges between two and five years. With regard to learning outcomes, the level 6 qualification from South Africa appears to have broader scope, as it includes auditing in addition to accounting. The qualification from the Namibia University of Science and Technology appears to focus on public accounting, preparing accountants for local and national government functions. In the third year, there are two modules addressing public and government finance and accounting. The University of South Africa (UNISA) and the Kenyan TVETA qualifications in accounting include entrepreneurship modules, reflecting the realities in these two countries and responding to the drive toward self-employment and business creation rather than formal employment perspectives. Another adaptation to local conditions is the inclusion of English language communication in the learning outcomes of the Namibian qualification, as the level of English among secondary school graduates is known to be problematic.

The analysis and comparison of four African qualifications with the ESCO qualification revealed significant disparities. The first notable factor to mention is the fact that there is not adequate information to make a comprehensive comparison. For example, for three of the qualifications there was no learning outcome specified. Although one had exit-level outcomes specified, they were clustered rather than being specific to that of the ESCO profile. For example, the South African qualification from the University of South Africa, which was the only one with adequate information, mentions interpreted financial statements, which can include

Figure 17: Match of a sample of national accounting qualifications profiles to ESCO



Accounting Technicians
Diploma (ATD),
KASNEB

Accounting Technicians
Diploma, UNISA 83289

Diploma in Accounting,
University of Namibia
(UNAM)

Diploma in Accounting
and Finance,
International Training
College Lingua

KEN1

SA1

NAM1

NAM2

interpreting income statements, balance sheets and general ledgers, while with the ESCO profile these are explicitly specified. The other three qualifications from Namibia and Kenya could only make a determination based on modules and the levels – for example, interpretation of financial statements is generally covered in financial accounting as a module, which this qualification has as part of its core module.

3.6.3 Coding

Coding is a skill for programming and developing apps and websites that can be performed at many levels and for many purposes. It is described as based on a mindset, and it is probably therefore that there is a focus on bootcamps and short coding courses, to motivate this mindset and identify those who show aptitude for further development. The courses are meant to set students up for a successful move into a tech career and aim to address the skills shortage that is described by companies in industry.

A **South African** study comparing coding initiatives was done by Sineke under the title Exploring Coding Bootcamps in South Africa. The following excerpts were taken from this study. Coding in Botswana is provided by the same private coding training providers as in South Africa, following the same approach. The coding training provided in **Kenya** is done by private commercial training providers, who also partner with UNESCO coding initiatives on the African continent, which often target women and underprivileged youth. All of the programmes seem to be working towards solving two complex challenges, youth unemployment and the shortage of software skills in South Africa:

- › WeThinkCode
- › Umuzi
- › Project CodeX
- › CodeSpace
- › Quirky30
- › CapaCiTi
- › Tshimologong Skills Academy
- › HyperionDev
- › mLab CodeTribe
- › Code College

The concept of a coding bootcamp is said to have originated in the USA in late 2011. Since then, it has taken off across the world and, now, bootcamps are largely paid-for programmes that offer people an intensive period of upskilling to help them move into tech careers. In South Africa, bootcamps offer the same promise. The thinking behind establishing bootcamps in South Africa seemingly aims to address the skills shortage that is described by companies in industry. Coding bootcamps in South Africa tend to attract young people from under-served communities. CodeX, for example, has an 87% black student enrolment rate. Their selling point is a career in a high-paying, in-demand job, so this proposition seems like an attractive option to those who are interested in tech but don't have the means to get into it through more formal streams. Many of the bootcamps in our research require students to have completed Matric. Students also need to show an aptitude for software programming, which is determined by an online assessment.

Thereafter, their attitude and motivation for learning is assessed, with some programmes taking students through an in-person interview, or, in the case of WeThinkCode, a selection bootcamp from which the final cohort is selected. Umuzi (a South African IT workforce development organisation) is working on new psychometric-based assessments that they believe will give them a better idea of whether an applicant will be successful in tech, strategy or creative careers. Bootcamp programmes often receive funding from companies. This may come in the form of donations or companies might opt to sponsor students throughout the programme. Alternatively, some bootcamps also receive grant money. Some programmes charge fees while others use the pay-it-forward principle. Many local bootcamps fall into the formal classification of a learnership. Learnerships are part of the South African qualifications framework, which means that they are made up of theoretical and practical applications. In a coding bootcamp, this could mean being taught a Javascript framework, then working on a project where you use that framework practically.

Teaching approaches at the bootcamp differ by bootcamp provider. For instance, Umuzi begins with teaching technical skills before placing students in cross-functional teams. Because Umuzi accepts students into web development, UX, UI, data and copywriting streams, the teams work together to create solutions that make use of this wide variety of skills. Most programmes run for three to nine months. There are exceptions, of course, such as WeThinkCode. Here, students embark on a two-year long full stack development programme, which includes two internships. HyperionDev offers the shortest programme, where students spend three months on a web development course.

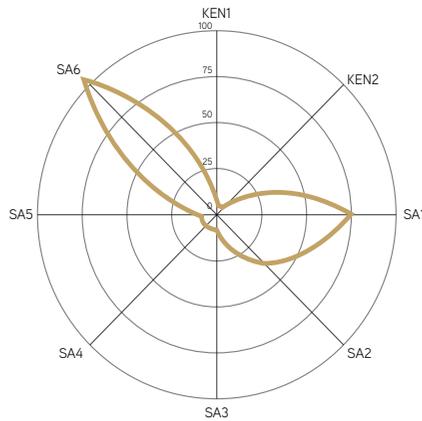
Learning how to code is not the only training that students receive at local bootcamps. All the programmes offer either work-readiness or interview preparation as part of their courses. CodeSpace, for example, offers an extended programme that runs two weeks longer than their core programme to prepare students for the office environment. Giving students opportunities to practice skills that companies find valuable, like communication and teamwork, is something that Project CodeX and Umuzi also offer. For example, Umuzi's cross-functional product teams provide a good opportunity for their students to practise skills like collaboration and communication. Project CodeX's students work in teams on a week-long hackathon at the end of each semester.

With regard to the transition into employment, a few programmes have industry partners who absorb interns from the programmes into full-time positions. These industry partners vary, from large corporates to small businesses. Umuzi, which offers programmes that are popular in creative agencies, have partnerships with the likes of King James, HelloComputer and VML. Some bootcamps, like mLab, provide support for entrepreneurial ventures founded by their graduates.

The coding programmes considered above broadly fall into two categories: bootcamps and 'learnerships', on the one hand, and formal app and web design qualifications, on the other. The first category has sprung up partly because of the need to have a talent pool for current and anticipated needs in the tech labour market. As this is a disruptive and new market, considerations of improving diversity and poverty reduction also play a role here. The second category is more of a formal training response to a rather new market, where formalisation and recognition of qualifications has not yet been well established. Matching to ESCO qualifications for the first category is not easy, as the bootcamps and learnerships are very much focused on the African

context and have more objectives than just tech skills transfer. Higher-level coding courses that prepare for employment in an international tech sector are comparable to ESCO and therefore score high.

Figure 18: Match of a sample of national coding course profiles to ESCO



Coding, Digikids and @iLabAfrica, Strathmore University	Coding workshops, Pwani Teknogalz	WeThinkCode	Umuzi
KEN1	KEN2	SA1	SA2
Project CodeX	CodeSpace	Quirky30	CapaCiTi
SA3	SA4	SA5	SA6

Hospitality qualifications mostly originate in Africa and do not necessarily have the same focus as ESCO qualifications. Whether the national or the international hospitality industry formed part of the qualification design might make a difference, but this could not be established in the context of this study. Breadth and depth of accounting qualifications differ from ESCO qualifications at the same levels.

Accounting might seem to be based on internationally agreed skills sets, but the difference between African and ESCO qualifications may be based on different office practices and human resource requirements in Africa-based firms. An account assistant in an African firm may be expected to execute a different set of tasks than someone in a similar position in a European firm. Further testing of this assumption is required. It was observed that in this limited sample of qualifications, those qualifications initiated, owned and taught by private providers appeared to have more limited learning outcomes compared to those that originated from national/public bodies and institutions, qualification-generating bodies. As a consequence, qualifications may be inflated and promising higher levels of learning achieved than are actually realised. However, in various cases, links between private training providers and industry may be stronger, resulting in more practice-oriented training (including more internships).

3.7 Closing comments

Chapter 3 has provided a detailed stocktaking and analysis of the state of play and dynamics of qualifications frameworks in Africa, especially national and regional frameworks. The very high response to the online survey, combined with the technical country visits, and the supplementary information accessed through the desktop analysis, has provided a firm foundation for the ACQF process going forward. In addition, this chapter has explored, and expanded on, methodologies for the analysis of level descriptors and qualifications that can be further developed.

Overall, this chapter has shown that Africa has a huge number of NQF-related activities. SADC seems to be the most advanced, but several countries in the north, east and west of the continent have made huge strides in developing their NQFs, with the EAC, ECOWAS and, to some extent, IGAD, well on their way to developing RQFs. More broadly, the range of African policies and strategies – including Agenda 2063, and its First Ten-Year Implementation Plan (2013–2023), the Continental Education Strategy for Africa 2016–2025, the Agreement Establishing the African Continental Free Trade Area, the Continental TVET Strategy, the Protocol to the Treaty Establishing the African Economic Community Relating to Free Movement of Persons, Right of Residence and Right of Established, and the Revised Convention on the Recognition of Studies, Certificates, Diplomas, Degrees and Other Academic Qualifications in Higher Education in African States – provide an incredibly rich framework in which improved harmonisation of qualifications can take place.

Critically, this chapter has also shown that the ACQF can be a truly African initiative, which does not have to be developed using a template that is more than ten years old. While the context of the continent is always important to remember, specifically the many countries that are still subject to unrest, lack of access to basic necessities, and with varied internet connectivity, there are also huge opportunities. A fifth-generation qualifications framework can accelerate Africa's development and position it very well internationally. In Chapter 4, we consider the broader international context and what it offers for Africa, after which we return in Chapter 5 to looking at some of the specific opportunities available as the ACQF process unfolds.



4

INTERNATIONAL CONSIDERATIONS

Key points

- Qualifications framework development, including both National Qualifications Frameworks (NQFs) and Regional Qualifications Frameworks (RQFs), is an important global phenomenon and the African continent stands to benefit from not only being part of this process, but also in inspiring and even showcasing new developments in this area.
- Referencing between NQFs and an RQF has given countries the opportunity to reflect on their quality assurance systems across the sectors and the linkages with each other and to the NQF. This, in turn, has strengthened sector relationships, qualifications pathways and the effectiveness and efficiencies of the quality assurance systems. The diversity of RQF initiatives continues to increase globally, as new demands and mega-trends (technology, digitalisation, climate change, migration and the Covid-19 pandemic) impose more pressure on human and workforce development policies and instruments.
- France's shift to level descriptors, where the language is more inclusive of both sectors and more reflective of the European Qualifications Framework (EQF) structure, may prompt other countries with similar framework descriptors to shift to the international approaches to NQF structures.
- Qualifications frameworks are part of a broader set of recognition instruments and approaches. On their own, NQFs and RQFs are limited in their ability to achieve their objectives, but as part of the broader constellation of tools, they play a critically important role in facilitating the recognition of learning, mobility of learners and, by implication, also better matching between the job market and the training of people for those jobs.
- Africa is well prepared to consider a multidisciplinary approach that draws on nearly 30 years of qualifications framework developments internationally. If the African Continental Qualifications Framework (ACQF) is to become a framework responsive to ubiquitous digital and green transformation of work and skills, to new types of qualifications, to learning anytime, everywhere and in line with a strong social inclusion agenda, these lessons will have to be carefully interrogated, and the gaps identified in this mapping report will have to be carefully investigated.

4.1 Introduction

The conceptualisation and introduction of the ACQF takes place within a broader, and very dynamic, international context. This context is further informed by not only the global Covid-19 pandemic and the strong emphasis towards digital learning, but also the increased rates of unemployment across the world and, as a result, the need for increased flexible learning and agile credentialing to boost employability. These contemporary considerations are in addition to the evolution in qualifications frameworks, as described in Chapter 2, and importantly also the emerging thinking on harmonisation of education systems, also captured in Chapter 2. In all these developments, learning outcomes have become a common currency that have enabled the development of these methodologies across learning programmes, courses, curricula, qualifications and, more recently, credentials. An important example of harmonisation, with a strong cross-border focus, is the alignment and/or referencing between NQFs and an RQF – an example on the African continent is the alignment process underway between the Southern African Development Community (SADC) RQF and NQFs in SADC countries. There are also international examples of NQFs in Africa referencing to the EQF and/or to the Association of Southeast Asian Nations (ASEAN) Qualifications Reference Framework (QRF).

It soon becomes obvious that NQFs and RQFs being developed in Africa are impacted on by international developments, both in terms of their design and their international linkages that facilitate recognition and mobility from and to the continent. In this chapter, we explore some of these new international developments that will be important for the ACQF process, as well as other forms of recognition that are complementary to qualifications frameworks. We take the time to reflect on the differences and similarities between the Anglo-Saxon, francophone and lusophone approaches to qualifications frameworks, as this is an area that tends to cause confusion and must be carefully considered in the ACQF process. The last part of this chapter summarises the progress with referencing and alignment between NQFs and RQFs in Africa and internationally.

4.2 New qualifications framework developments across the Middle East, Asia, Europe and North America

4.2.1 Middle East

Qualifications frameworks, national and regional, have been in development in the Middle East region for over a decade. Table 29 summarises the state of play of the Arab Qualifications Framework (AQF), which includes three African NQFs (Egypt, Morocco, Tunisia) and is therefore part of the ecosystem of qualifications frameworks of the African continent.

The AQF is a ten-level RQF and is closely associated with the Arab Network for Quality Assurance in Higher Education (ANQHE). Qualifications in the AQF are classified from level 4 (school certificate, higher education entry level) to level 10 (doctorate degree).

Bahrain has developed, and since 2014 operationalised, a robust NQF (Al-Sindi, 2020). It is a ten-level integrated and compulsory framework, which covers all learning sectors and all forms of learning and includes all quality-assured learning programmes. The BQF aims to ensure the quality and validity of qualifications, promote learning outcomes-driven education and training, improve the transparency of the value of qualifications, facilitate credit transfer and Recognition

of Prior Learning (RPL), facilitate progression paths within and across education and training sectors, and encourage cooperation and collaboration among education and training stakeholders. The BQF is open for cooperation (comparison/referencing) with other NQFs in the world and in 2018 has officially referenced with the Scottish Credit and Qualifications Framework, and the referencing report is accessible (Bahrain Education & Training Quality Authority and Scottish Credit & Qualifications Framework, 2018). Other BQF international benchmarking activities are being carried out in 2020 with qualifications frameworks in The Netherlands, Malaysia, New Zealand and Australia.

Table 29: Status of development of qualifications frameworks cooperating under the umbrella of the Arab Qualifications Framework

Country	Qualifications framework	Levels	Status	Sectors
Bahrain	National Qualifications Framework (BQF)	10	Operational since 2014	Higher education (HE), vocational education and training (VET), general education (GE)
Kingdom of Saudi Arabia (KSA)	Saudi Arabia Qualifications Framework	10	Not yet operational	HE, VET, GE
United Arab Emirates (UAE)	Qualifications Framework Emirates	10	Operational 2012	HE, VET, GE
Kuwait	–	–	Not yet developed	–
Oman	Oman Qualifications Framework	10	Operational 2018	HE, VET, GE
Jordan	Jordanian National Qualifications Framework	10	Not yet operational – proposed	HE, VET, GE
Egypt	Egyptian Qualifications Framework	8	Legislation in approval – not yet operational	HE, VET, GE
Morocco	National Qualifications Framework (Cadre National des Certifications)	8	Operational	HE, VET, GE
Tunisia	National Classification of Qualifications (Classificaion Nationale des Qualifications)	7	Operational	HE, VET, GE

Source: Al-Sindi (2020)

Table 30: Arab Qualifications Framework

Level	Academic qualification	Minimum duration of post-secondary study (years, fulltime equivalent)
10	Doctorate degree (PhD, DPhil)	8 (2 years post-Master's degree)
9	Master's degree (MSc/MA/MPhil/Master of...)	6 (2 years post-Bachelor's degree)
8	Postgraduate Diploma (Higher Diploma in KSA) Postgraduate Certificate	5 4.5
7	Bachelor's Degree (BSc/BA/Bachelor of...)	4
6	Higher Diploma	3
5	Associate Degree/Diploma	2
4	School Certificate (HE entry level)	–

Source: Al-Sindi (2020)

Governance of the BQF is assured by the Directorate of NQF Operations of the General Directorate of NQF and Examinations, one of the two main structures of the Education and Training Quality Authority. BQF operations consist of two main components (National Qualifications and Foreign Qualifications) and are structured in standards with indicators. BQF operations related with National Qualifications are made up of: 1) institutional listing (prerequisite), and 2) qualification placement.

4.2.2 Europe

The EQF could be considered the benchmark of regional frameworks, especially in terms of its reputation and other regional communities learning from the European experience. The EQF is based on a recommendation adopted by the European Parliament and the Council on 23 April 2008 (European Union, 2008), which was reviewed and strengthened in 2017 (European Union, 2017). The EQF has developed tools to assist the transparency of the NQFs, including the eight-level framework based on knowledge, skills and responsibility and autonomy, ten referencing criteria included in the six technical annexes, which address principles for quality assurance of qualifications included in NQFs referenced to the EQF, for credit systems, and elements for the data field for the electronic publication of information in qualifications with an EQF level. The EU has also developed a collection of EQF notes, outlining learnings from implementation and common understandings. The EQF invites member states to reference the NQF (or the National Qualifications System, SNQ) levels rather than individual qualifications to the EQF. As of April 2018, there are 36 countries that have undertaken formal referencing, with some countries renewing their referencing report to reflect current changes in the national context. The EQF has also carried out technical comparisons with countries outside Europe – for example, Australia, Hong Kong and New Zealand. Interest is also being noted with international sectoral frameworks in having qualifications referenced.

The EQF works together with other European and international instruments supporting the recognition of qualifications:

- The Council Recommendation of 26 November 2018 on promoting automatic mutual recognition of higher education and upper secondary education and training qualifications and the outcomes of learning periods abroad refers to the EQF as a way to foster transparency and build trust between national education and training systems.
- Directive 2005/36/EC addresses the recognition of professional qualifications in the EU, enabling professionals to move across borders and practise their occupation or provide services abroad.
- The Lisbon Recognition Convention is an international agreement administered by UNESCO and the Council of Europe that allows for the recognition of academic qualifications in Europe and beyond.
- The EQF is compatible with the Qualifications Framework for the European Higher Education Area and its cycle descriptors. The framework was agreed by education ministers of the intergovernmental Bologna Process in 2005. The Bologna Process is designed to promote the internationalisation of higher education in Europe through improving recognition of qualifications and streamlining quality assurance mechanisms.
- Other related tools: the development and use of mobility and recognition tools, such as the European Credit Transfer System and the Diploma Supplement, to increase transparency of outcomes, and Standards and Guidelines for Quality Assurance in the European Higher Education Area

4.2.3 Asia

The ASEAN Qualifications Reference Framework (AQRF) was proposed in 2011 and endorsed by ASEAN ministers in 2015 (ASEAN, 2018). ASEAN includes ten member states. There is a focus on an integrated economic community, with aspirations of free flow of skills labour and harmonisation of qualifications. The AQRF is an eight-level framework based on learning outcomes and it is supported by resources aimed at increasing understanding of quality assurance, learning outcomes and non-formal and informal learning. The AQRF allows member states to reference their NQF, or to reference qualification types or key qualifications. Currently, there are four member states that have reviewed their NQFs and quality assurance arrangements against the AQRF. However, two member states are still to confirm an NQF and one has no public plans to implement an NQF. The AQRF is also linked to the ASEAN Quality Assurance Framework and an emerging project on credit transfer. In addition, developing common competency standards for various professions has also been a focus for the region. Although operational, it is still early days for this framework and more work is needed to build the capacity of member states that are yet to confirm an NQF and to build trust across the region.

4.2.4 Caribbean

Following agreement on a Caribbean Community (CARICOM) Regional Strategy for Technical and Vocational Education and Training (TVET) in 1990, and the adoption of a competence model for TVET in 2002 by the CARICOM Council for Human and Social Development (COHSOD), the basis was laid for a CARICOM-wide TVET strategy, based on the first NQFs in the region, developed in Jamaica, Trinidad and Tobago, Barbados and Belize. At this stage, the

decision was made to structure vocational qualifications around five occupational levels. The Caribbean Association of National Training Agencies (CANTA) was established in 2003 and endorsed by CARICOM as the implementation arm of the regional coordinating mechanism for TVET. The key purpose of CANTA was to establish and govern a regional training and certification system, called the Caribbean Vocational Qualifications (CVQs), to ensure standard and uniform delivery of competency-based training TVET within the CARICOM Single Market and Economy. In 2012, the CARICOM RQF was developed, informed by the principles of the 'ideal Caribbean citizen', and based on a set of level descriptors (CARICOM Secretariat, 2012). A need for integration and creating a level playing field for free movement of skilled labour within the CARICOM Single Market and Economy has recently been identified by the ILO (2020a). CARICOM has also been working on the establishment of the CARICOM quality assurance register, while only two member states have officially adopted the CARICOM RQF. A regional teacher qualifications framework is also under development. CARICOM has also been coordinating with UNESCO on the piloting of the Skills Passport in Trinidad and Tobago (UNESCO, 2020).

4.2.5 Pacific

The member states include fifteen Pacific island nations and the RQF was endorsed in 2010. The regional Pacific Qualifications Framework (PQF) is a ten-level framework based on learning outcomes and is linked to a regional quality assurance framework, and a register of standards and qualifications. The qualifications framework was designed as a common reference framework, but included additional aspects to provide the basis for an NQF for those island nations that did not have the capacity or relative size of a qualifications system to warrant developing an NQF. The Pacific Register of Qualifications and Standards (PRQS) includes agreed standards for a quality assurance agency and a provider of education and training services. The PQF is not linked to strong student or labour mobility initiatives and is led by a secretariat working on behalf of the ministers of education and training in the island nations. The quality assurance agencies do not have a direct voice or representation on this regional committee. Regionally, those nations with emerging or stable qualifications systems are generally facing constraints such as inadequate capacity of providers and inadequate funding. There are still island nations yet to confirm their own NQF or to have adopted the PQF as a national framework.

RQFs, such as those across the EQF, AQRF and PQF, closely resemble the thinking and developmental work underway in the SADC RQF, the Economic Community of West African States (ECOWAS) RQF and the East African Qualifications Framework for Higher Education (EAQFHE). Early thinking in the Intergovernmental Authority on Development (IGAD) also seems to be aligned to these processes, while central Africa is lagging both in terms of national and regional qualifications framework developments. Just as with NQFs, the cyclical phases of development can also be applied to RQFs, ranging from the explorative to design, adoption, activating, operational and review stages (Deij, 2019). In this regard, the EQF is the most advanced and has been reviewed, while the AQRF and PQF are operational, but with the AQRF at a more established stage. In Africa, the SADC RQF has been under development for the longest period, since 2011, but it was only officially launched in 2017. The RQF contains several well-developed elements, such as regional level descriptors, quality assurance and RPL guidelines, an early stage qualifications portal, and also a well-organised technical committee overseeing its development and implementation (SADC TCCA, 2018). The eight-level EAQFHE was developed

in 2015 by the Inter-University Council for East Africa (IUCEA) as a common reference framework. There is also an intention to develop regional TVET and teacher education qualifications frameworks (Jowi, 2020).

Table 31 provides a summary of various regional qualifications framework developments taking place internationally, including in Africa.

The strong influence of the EQF is important to note. The recent decision by the European Commission to actively explore comparison between the EQF and third countries (countries outside of Europe) will undoubtedly further deepen this influence. The interactions between RQFs is certainly also something to keep in mind going forward as these regional structures mature and new ones are established. Overall, new qualifications framework developments across the Middle East, Asia and Europe are already impacting on thinking in Africa. However, care must be taken not to ascribe too much weight to the influences from outside of Africa. As noted in Chapter 2, there are many aspects of learning and qualifications with strong African origins that have been assimilated into qualifications frameworks.

Table 31: International regional qualifications framework developments

RQF	Stage of development	Strengths	Weaknesses
AQRF	Operational	Strong regional cohesion. Some leading countries (Malaysia, Philippines).	Qualifications systems are only emerging
EQF	Review	Strong legislative, conceptual and methodological base. Strong linkages with regional quality assurance, labour and student mobility initiatives. EQF is one of a range of instruments that facilitates recognition. Mostly mature national qualifications systems.	Complexity of actors, systems and policies
PQF	Activating	Draws on Pacific regional identity	Qualifications systems are only emerging
CARICOM TVET RQF	Operational	Drew on regional TVET certification system. Strong regional coherence.	Limited to TVET
SADC RQF	Activating	Many years of development. Formally established. Technical Committee on Certification and Accreditation. Some leading countries (South Africa, Mauritius, Namibia, Seychelles).	Limited implementation capacity. Variations linked with historical evolution of education and training.
EAQFHE	Adopting	Too early to say	Limited to HE
ECOWAS RQF	Design	Too early to say	Too early to say

The development of the Credentials Framework (CF) for the United States is another important

international development to keep an eye on (Rein, 2016). Championed by the non-government sector, the CF is potentially the first of a new generation of qualifications frameworks that aims to encompass degrees and non-degree credentials such as 'certificates, industry certifications, licenses, apprenticeships, and badges' (Keevy et al., 2019, p. 235). The initiative includes the development of a Degree Qualifications Profile (DQP) with a strong higher education orientation, but with knowledge and skills domains and progressions, similar to that used in level descriptors. It would be useful to explore some of the latest developments towards the establishment of the CF as the ACQF process unfolds.

At this point, it would be remiss not to touch on the potential scope and purpose of the ACQF. As an RQF, the ACQF could certainly take learnings from the RQFs described above. For example, the EQF is an RQF that is also continental, while the ACQF is continental but geographically embraces existing and emerging RQFs, such as in SADC, the East African Community (EAC) and ECOWAS, with many other Regional Economic Communities (RECs) having expressed interest in following suit. In CARICOM and the EAQFHE, the move is towards sectoral RQFs in TVET, higher education and even teacher education. This mapping study is not primarily concerned with the scope and purpose of the ACQF, but it is evident from the information gathered, both continentally and internationally, that a few options could be considered in terms of scope. In addition, as was highlighted in Chapter 2, the lack of an agreed continental occupational standard classification system should also be considered. We will return to these important considerations in Chapter 5.

4.3 Progress with referencing and alignment of African qualifications frameworks

As detailed throughout this mapping report, the emergence of RQFs has grown out of communities of countries with an aim 'to facilitate mutual trust in qualifications and to promote student and labour mobility; there they are linked to other initiatives related to mutual recognition of qualifications, of good and of services' (Bateman & Coles, 2015, p. 19). Experiences in the EU, Pacific and ASEAN indicate that the establishment of an RQF impacts on the further development of NQFs within participating countries. Countries with existing NQFs prior to the establishment of an agreed RQF, such as Samoa and Malaysia, were motivated to review their NQFs in preparation for referencing the RQF. Countries without an NQF were motivated to develop a NQF or to develop an NQF that links sector frameworks (for example, Thailand). For these latter countries, the influence of the RQF in terms of the number of levels and domains in the level descriptors is in some instances clear in the development of the NQF, even though some RQFs clearly state that the RQF aims to have a neutral influence on NQFs and that it respects national sovereignty.

With the development of an RQF, there is more to the framework than the level descriptors. Participating countries involved in the discussions and consultation process in the development of the RQF would have had to come to some common understandings, such as the purpose and aims of the RQF, the use of learning outcomes, the definition of learning outcomes and application across the education and training sectors, quality assurance principles, defining qualifications, approaches to referencing, governance arrangements and maintenance of the RQF. Countries with emerging qualifications systems and quality assurance built their capacity through these common understandings, strengthening their own systems and their understanding of reforming

qualifications and structures. Having an RQF means that countries meet regularly, reinforcing commitment to the aims and purpose of the RQF, to discuss issues of understanding and strategies to promote the referencing process more broadly. The referencing process itself requires participating countries to review reports and query anomalies, inaccuracies or interpretation. These activities are fundamental to building trust in participating countries' qualifications systems and in promoting other strategies that support the aims of the RQF, such as recognition for student or labour mobility.

Table 32: Summary of international RQF-NQF referencing processes

RQF	Number of participating countries	Number of countries that have referenced to the RQF	Additional noted
AQF	10	Information not available	
ASEAN QRF	10	4	
CARICOM	15	0	
ECOWAS	15	0	Not yet fully established
EAQFHE	5	0	Fully established, but implementation and governance limited to the higher education part of the RQF
EQF	39	36	Hong Kong (2018), New Zealand (2016) and Australia (2016) have completed technical comparison with the EQF; a second round of referencing of EQF countries has started
PRQS	15	6	
SADC	16	2 completed 1 underway	Term 'alignment' is preferred
Virtual University for Small States of the Commonwealth	32	0	Relies on different processes to the above RQFs

The resultant referencing process, or alignment as preferred in SADC, has given countries the opportunity to reflect on their quality assurance systems across sectors and the linkages with each other and to the NQF. This has often strengthened sector relationships, qualifications pathways and the effectiveness and efficiencies of the quality assurance systems. The EQF, which has the longest history of referencing activity, indicates that some countries are renewing their referencing reports as the result of changes within their qualifications system (such as the NQF or the quality assurance system), indicating that qualifications systems are continually evolving. The concept of

referencing was described in detail in Chapter 2 and will not be repeated here, but what is of value to the ACQF process is a high-level summary of the extent to which referencing had taken place at the time this report was being finalised in September 2020.

Table 32 provides a high-level summary of the available information on referencing and alignment that could be sourced during the ACQF mapping study. Developments and data are quite dynamic, and we would expect that it could be updated during the next phase of the ACQF process.

The EQF Recommendation (European Union, 2017), specifically recommendation 13, provides for potential cooperation with third countries to enable comparison of national or regional qualifications frameworks with the EQF, potentially opening up cooperation with other non-EQF countries.

For the ACQF, referencing is a central concept that will need to be explored. If the ACQF is to follow in the footsteps of the EQF and AQR, then all African NQFs will need to be referenced to the ACQF. Such a process ensures ongoing alignment and comparability between African NQFs; in effect, the ACQF then becomes a catalyst for harmonisation, convergence, transparency and mutual understanding of NQFs across the continent.

4.4 Recognition beyond qualifications frameworks

This mapping report is primarily concerned with the state of play of national and regional qualifications frameworks in Africa, but what is important to note is that qualifications frameworks are part of a broader set of recognition instruments and approaches – as highlighted by the cases mapped in this report. As in any other ecosystem, NQFs and RQFs cannot work in isolation from the other pillars and components that together make up the ecosystem of skills and qualifications, education and lifelong training. In isolation, NQFs and RQFs are limited in their ability to achieve their objectives, but as part of the broader constellation of tools, they play a critically important role in facilitating the recognition of learning, mobility of learners and, by implication, better matching between the job market and the training of people for those jobs. Earlier chapters have referred to some of these additional instruments, including:

- Conventions – Addis Convention on Higher Education (UNESCO, 2014c) that establishes a legal framework for the fair and transparent evaluation of higher education qualifications in the African region to facilitate inter-university cooperation and exchange through the mobility of students, researchers and faculty.
- Classification systems – The multilingual European Skills, Competences, Qualifications and Occupations (ESCO). The option of developing an African standard classification of occupations, potentially to allow RQFs to continue to be developed, and to avoid duplication and reduction in transparency, was also mentioned.

Across qualifications frameworks, and including the two examples above, the use of learning outcomes has become commonplace and provides the common currency through which the various recognition schemes can be compared. In the brief summary below, drawing from a recent report on skills migration in the IGAD region (ILO, 2020c), we present a high-level summary of the different schema and then end with some thoughts on what the future could look like.

4.4.1 Credential evaluation

Historically, the term ‘credential evaluation’ has been used to refer to the review and evaluation of foreign qualifications – the ability for a country to check if a qualification awarded outside of the specific country is indeed valid. The process may include professional designations and also, in some cases, non-formal and informal learning. Credential evaluation precedes the emergence of qualifications frameworks by several decades. The approaches to credential evaluation are relatively well developed internationally and draw on the Lisbon Recognition Convention (1997), which applies to higher education in Europe, but has an equivalent in Africa, the Arusha Convention for Africa (1981) (which was renamed and updated to the Addis Convention on Higher Education in 2014, as mentioned above). Examples of competent recognition authorities that perform the evaluations include professional teaching councils, statutory and non-statutory professional bodies, employers and professional associations. The approaches are being expanded to use learning outcomes and have also become more automated, with digital tracking and information sharing across free international platforms.

Fundamental to the referencing process is the principle of mutual trust, which consists of both technical reliability and consensus among stakeholders and the way in which that consensus is rooted in custom and practice. The credibility of the consensus is based on agreement from roleplayers in charge of qualifications, certification processes and those using qualifications (employers, learners). There is a strong link between the methodologies employed in credential evaluation practices and benchmarking. Two principles are of value and are discussed in more detail below: substantial difference and comparability.

The notion of substantial difference is often used during benchmarking processes. The term originates from the credential evaluation sector and is applied in relation to the function of a qualification and the purpose for which recognition is sought. Substantial differences are differences between the foreign qualification and the national qualification that are so significant that they would most likely prevent the applicant from succeeding in the desired activity, such as further study, research activities or employment. Importantly, the burden of proof lies with the competent recognition authority to show that the difference between two qualifications (each from a different country) is substantial. According to the recommended procedure for the assessment of foreign qualifications developed by the Lisbon Recognition Convention Committee, assessments should seek to answer the following questions:

- Are the differences in (targeted or achieved) learning outcomes so substantial that the foreign qualification cannot be fully recognised? If so, is it possible to grant alternative or partial recognition?
- Are the differences in the further activities for which the foreign and the home country qualifications prepare so substantial that full recognition is not possible? If so, is alternative or partial recognition possible?
- Are the differences in key elements of the programme leading to the qualification so substantial in relation to similar programmes in the host country that full recognition cannot be granted in view of the purpose for which recognition is sought? If so, is alternative or partial recognition possible?
- Is the quality of the programme or the institution at which the qualification was earned so different from similar programmes or institutions in the host country that full recognition is not possible? If so, is alternative or partial recognition possible? (Hunt et al., 2009 in Keevy & Chakroun, 2015, p. 128).

4.4.2 Regional conventions

Both the Lisbon Convention and the Addis Convention (UNESCO, 2014c) have already been mentioned. Other examples, also overseen by UNESCO, exist in Caribbean (1974), and Arab States (1978), and Asia-Pacific (2011). The International Labour Organisation (ILO) also has a range of instruments in place that encourage skills recognition, including the Human Resources Development Recommendation, 2004 (No. 195), and the ILO Multilateral Framework on Labour Migration (ILO, 2006b). The Global Skills Partnership, launched jointly in 2015 by the ILO, the International Organisation for Migration and UNESCO, in association with the International Organisation of Employers and the International Trade Union Confederation, focuses on mobilising technical expertise of the three organisations towards supporting stakeholders to develop and recognise the skills of migrant workers, with a particular focus on women and the youth (ILO et al., 2018). More recently, the Global Convention of the Recognition of Qualifications Concerning Higher Education (UNESCO, 2019) has also come into effect. The convention was tailored towards promoting the rights of individuals to have their higher education qualifications evaluated in a fair and decent manner across the globe and to facilitate international academic mobility in general.

Additionally, the objectives of the convention support inter-regional and regional initiatives, global cooperation, policies and innovation in higher education, promote a culture of quality assurance in higher education institutions and systems, consistency and complementarity in quality assurance, in qualifications frameworks and in the recognition of qualifications in order to support international mobility and, above all, promote education for sustainable development, and contribute to structural, economic, technological, cultural, democratic and social development for all societies.

4.4.3 Trade and related recognition agreements

Trade recognition agreements promote trade in goods and services on three levels:

- Unilateral recognition: The most common form of assessing migrant workers' skills and competencies. Here a destination country of inward labour market migration decides on its own which skills and qualifications it will recognise. Many recognition schemes have public policy objectives like ensuring quality and standards of services and protecting consumer and national interests.
- Mutual recognition agreements (MRAs): Formal agreements between countries of origin and destination that focus on reciprocal recognition of certifications and competences of migrant workers. A wide range of MRAs exists, mainly in regulated professions.
- Trade/regional integration agreements: Agreements concluded in the context of regional integration, which encourage the development of mutually acceptable standards and criteria for licensing and certification and provide recommendations on mutual recognition (ILO, 2020c).

There is a growing trend towards the consideration of MRAs as contributing to learning recognition. The ASEAN region is the best-known example of where an MRA has formed the foundation for the recognition of skills, starting with the ASEAN Framework Arrangement on Services that was signed in 1995. In East Africa, the Common Market Protocol provides for EAC

partner states to mutually recognise qualifications, experience, requirements and licences or certificates granted, as well as for partner states to designate competent bodies to enter into MRAs to facilitate the movement of professionals.

In the African context, the African Continental Free Trade Area (AfCFTA) is intended to create a single market for goods and services, facilitated by the movement of people. As mentioned in Chapter 1, AfCFTA is a key flagship of African integration, to which the ACQF will also contribute. Recognition of education and harmonisation is specifically mentioned in the text and while still relatively new (AUC, 2019b), this regional integration agreement is being developed at a very opportune time for the ACQF. The interrelationship between the two processes can be mutually beneficial, but will require careful coordination at the level of the African Union Commission (AUC).

4.4.4 Professional standards and occupational licensing

Professional and occupational bodies, as well as public authorities, use professional standards and related criteria to award professional designations to individuals that meet the requirements for occupational licensing:

The term 'licence' (i.e., a licence to practice, which can be revoked) is frequently used incorrectly as a synonym for 'qualification' or 'certificate' (a statement of competence that cannot be revoked unless fraud is committed). In general, the term 'to license' (or 'to grant licence') means 'to give permission'. A licence may be granted by a party (licensor) to another party (licensee) as an element of an agreement. A licence may be issued by public authorities, or professional bodies, or unions authorized to do so, to allow an activity that would otherwise be forbidden (ILO, 2020c, p. 30).

Regulated trades, such as in the medical and legal sectors, tend to undergo stricter quality assurance by national bodies than non-regulated ones. Teaching, and more specifically, teacher professionalism and teacher migration, is relatively well developed in Africa and it will be important to build on these policy processes in concert with other professions. In this regard three sets of policies have been under development, including a Continental Teacher Qualification Framework, a Continental Framework of Competences and Standards for the Teaching Profession, and Continental Guidelines for the Teaching Profession (Nwokeocha, 2019) and the Continental Teacher Mobility Protocol (UNESCO IICBA, 2019).

4.4.5 Classification systems

Classification systems include the International Standard Classification of Occupations (ISCO), developed by the ILO in 1988 and updated in 2008. ISCO-08 uses two basic criteria to arrange occupations into the major, sub-major, minor and unit groups of the ISCO classification structure: skill level and skill specialisation. 'Skill' is defined as the ability to carry out the tasks and duties of a given job. 'Skill level' is a function of the complexity and range of the tasks and duties to be performed. 'Skill specialisation' is considered in terms of the field of knowledge required, the tools and machinery used, the materials worked on or with, and the kinds of goods and services produced. ISCO could potentially contribute to the international recognition of skills by providing a commonly understood reference point. ESCO, which was described in Chapter 2, and subsequently utilised for the development of qualifications profiles from a selection of African countries in Chapter 3, is another important classification system that could be revised

for the African context. The International Standard Classification of Education (ISCED) is also utilised widely in Africa.

4.4.6 World Reference Levels

The notion of a more independent global levelling instrument has been explored under the leadership of UNESCO since 2012. A wide range of international agencies, including the ILO, the European Centre for the Development of Vocational Training (CEDEFOP) and World Skills. Representatives from the key regional blocs that either have an RQF in place (such as the EU and ASEAN), or are in the process of developing an RQF (SADC and the Pacific), have also been active participants of this process. A wide range of countries, mostly those with NQFs at more advanced stages, have been involved from across all continents. Experts, and occasionally also invited organisations, such the International Centre for Technical and Vocational Education and Training centres, Burning Glass, VerifDiplom and others, have also participated. The original thinking behind the World Reference Levels (WRLs) draws on the 2012 recommendation of the Third International Congress on TVET, held in Shanghai, which has over the years provided an important incubation space for thinking and debates on the recognition of learning. The main purpose of the WRLs is to facilitate the ‘comparisons of the outcomes of lifelong learning and reach agreements on the recognition of qualifications and credentials’ (Hart & Chakroun, 2019, p. 15). The WRLs are positioned as a potential new common language that will be able to transcend many traditional boundaries:

The WRLs will offer a lingua franca that can be used not only with technical and vocational qualifications and credentials, but also with professional, general and academic qualifications, credentials and less formal sets of learning outcomes, and with job specifications and entry requirements for learning programmes (Hart & Chakroun, 2019, p. 14).

The WRLs have been concretised in a tool, initially manual in form, but this has also been converted into a digital app that has been field tested across pre-selected countries. The basic structure of the WRLs is made up of four broad levels (A to D), across eight stages of progression, in turn, premised on eleven elements of capability, organised in three groupings. The multidimensionality of the WRLs, including an internal progression, differs from the traditional qualifications framework level descriptors, but was developed to intentionally try and move beyond their limitations. The application of the WRLs creates a graphical profile that complements national and regional qualifications frameworks and systems of quality assurance.

While the WRLs may seem far removed from the realities of the ACQF, it is important to consider how this thinking, combined with the other examples described in this mapping report, may be of interest to the ACQF during its development.

4.4.7 Other forms of recognition

A few other recognition schemas are worth briefly mentioning. The first is learning metrics, notably international skills surveys and related statistical studies, which provide an alternative recognition approach that could be of more value in countries and regions where the other approaches are weak or absent. Examples include the Learning Metrics Task Force convened by the UNESCO Institute for Statistics and the Center for Universal Education at the Brookings Institute in the United States.

The second is the intersection between traditional qualifications (also referred to as macro credentials) and the new and fast evolving area of digital credentials (also referred to as micro credentials), a dynamic and evolving space, with a range of government, inter-government, for-profit and non-profit actors vying for attention. Numerous examples can be listed, but Europass stands out for its integration of platforms, including CVs, qualifications, and self-assessment tools. Digital credentials may be viewed as something only applicable to advanced economies, but migrants and refugees stand to benefit from digital credentials. Kiron, a non-profit organisation based in Germany and financed by crowdsourcing, is as an example of an institution that has been able to explore this potential (Vincent-Lancrin, 2016). Kiron, in partnership with 22 universities, offers refugees the option to obtain an accredited university degree free of charge, using a combination of online and offline learning. For the first two years, students can select several existing Massive Open Online Courses (or MOOCs) of their choice, which Kiron then modifies.

4.5 Diverse landscape of qualifications frameworks and systems on the continent

Developments and research on qualifications frameworks and systems have often been associated with English-speaking countries, communities and literature. As seen in this ACQF mapping report, on the African continent, currently NQFs have achieved wider consolidation among English-speaking countries. Among 17 countries (out of 40) found to have NQFs in place (legal Act approved and implementation started, and NQF in place for some time and reviewed), 11 are in SADC, of which only Mozambique is not an English-speaking country. Beyond SADC, other NQFs in place are in Cape Verde, Kenya, Morocco, Rwanda, Tunisia and Uganda.

However, for the ACQF development process and the configuration of the role and instruments of the future ACQF, it is fundamental to build on a nuanced and contextualised understanding of the similarities and differences of the diverse education and training traditions and qualifications frameworks, enabling their strengths and contributing to mutual understanding among the diversity of countries and regions. In other words, this implies improved knowledge of the features, developments and perspectives of qualifications systems and their qualifications frameworks of the Arabic-, French- and Portuguese-speaking African countries too. The aspiration of a common continental education space built on shared principles and goals partly depends on the gradual mutual acceptance of each other's achievements, principles and paths in establishing the qualifications systems and frameworks of independent African countries. Policy learning, rather than policy borrowing, should inform the ACQF process. Policy borrowing risks, at best, different levels of confusion and, at worst, denial of the education and training tradition in the country and/or region.

A more nuanced comparison of the similarities and differences is attempted below and will have to be further explored during the ACQF process. In this regard, it is important to note that despite national societal specifics and education and training traditions, these countries also share certain aspects of concepts, principles and structural features related with their systems of education and training. Considering the domains of interest of this mapping report, we look at the main dimensions below:

- › status of NQFs;
- › concept of ‘qualification’; and
- › competence-based approach.

4.5.1 Countries with links to French traditions in education and training

Status of NQFs

In this report, we have made a distinction between an SNQ and an NQF. This differentiation is essential when we argue that countries without established qualifications *frameworks* have qualifications *systems* with defined types and levels (cycles) of qualifications, including more or less developed quality assurance of cycles, programmes and of design and award of qualifications:

Qualification system

This includes all aspects of a country’s activity that result in the recognition of learning. These systems include the means of developing and operationalising national or regional policy on qualifications, institutional arrangements, quality assurance processes, assessment and awarding processes, skills recognition and other mechanisms that link education and training to the labour market and civil society. Qualifications systems may be more or less integrated and coherent. One feature of a qualifications system may be an explicit framework of qualifications (OECD, 2006).

Qualification framework

A qualification framework is an instrument for the development and classification of qualifications according to a set of criteria for levels of learning achieved. This set of criteria may be implicit in the qualifications descriptors themselves or made explicit in the form of a set of level descriptors. The scope of frameworks may be comprehensive of all learning achievement and pathways or may be confined to a particular sector, for example, initial education, adult education and training or an occupational area. Some frameworks may have more design elements and a tighter structure than others; some may have a legal basis, whereas others represent a consensus of views of social partners. All qualification frameworks, however, aim to establish a basis for improving the transparency, quality, accessibility, linkages and public or labour market recognition of qualifications within a country and internationally (Tuck, 2007, p. 2).

‘Qualification framework’ means an instrument for the development and classification of qualifications according to a set of criteria for specified levels of learning achieved, which aims at integrating and coordinating national qualifications subsystems and improve the transparency, access, progression and quality of qualifications in relation to the labour market and civil society (European Commission, 2017, C189/20).

This mapping study found that countries such as Cameroon, Senegal and Togo have *implicit* qualifications frameworks, consisting of a range of levels of qualification in the sub-system of technical-vocational education, and the higher education framework. The shift to develop *explicit* NQFs, based on explicit descriptors of levels of qualification, and oriented to integrate and clarify the links between levels and sub-systems, is a further step that countries can take.

Except for Morocco and Tunisia, the development and establishment of *explicit* NQFs, in the meaning explored in this report, has not been at the forefront of most countries' policy priorities, or has not been particularly successful. If Mauritius can be considered bilingual (English and French), then it is a rare case of advanced NQF (in operation and reviewed) related to this country grouping. In the last few years, a changing trend is gradually emerging, though. Countries such as Cameroon and Madagascar have taken steps to start reflection and conceptualisation of their NQFs, as the need for integration and permeability between sub-systems and types of existing qualifications has become a determining issue for clarity in the qualification system, and better chances for people's lifelong learning pathways.

The relative rarity of an explicit qualifications framework has not prevented the development of instruments such as credit systems and learning outcomes approaches. The prevalence of the *Approche par Compétences* (APC, competence-based approach) in TVET systems of Morocco, Tunisia and Cameroon shows clearly a) that learning outcomes approaches can predate the establishment of an NQF in a country; and b) the linkage between APC training engineering and the target qualifications levels of the sub-system, as exemplified for Morocco and Cameroon. The establishment and operationalisation of NQFs will build on the existing system of qualifications levels and types, as they have social meaning and value, and bring in new paradigms related with vertical and horizontal links, progression, and a more inclusive and flexible view on a continuum of learning pathways and learning achievements.

Concept of 'qualification'

As discussed above, in most French-speaking countries, the concept of 'qualification' (in English) corresponds to 'certification' (in French), which corresponds to the assessed outcome of learning (*diplôme, brevet, certificat*). In contrast, the French term 'qualification' corresponds to a different category, notably the validation of competence given by the world of work (social partners, employers), determining that a person is *qualifié(e)*. Consequently, these NQFs consist of 'certifications' (*diplomas, certificates, brevets*) classified by level of 'qualification'.

The newly adopted French National Framework of Professional Qualifications, adopted on 8 January 2019, has eight levels of qualification and makes explicit the definitions of level descriptors, based on the combination of knowledge, skills, and responsibility and autonomy.

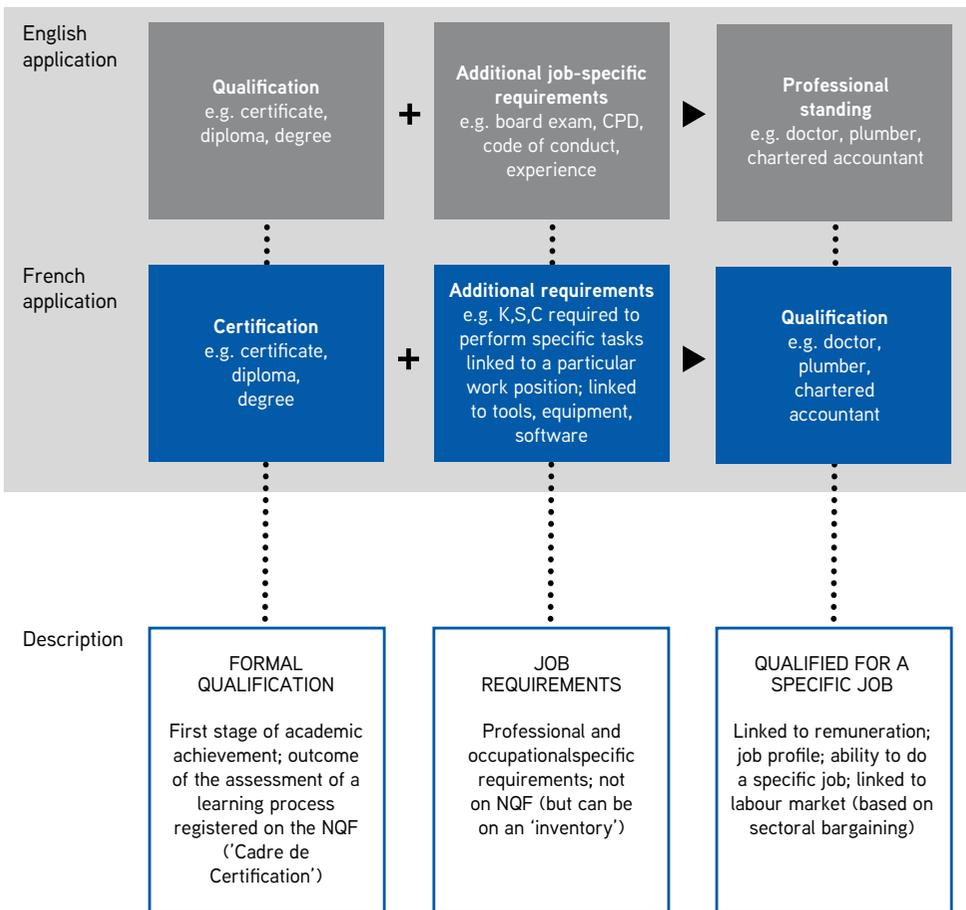
In the context of Morocco, the TVET system offers two types of this training-qualification relation: *formation diplômante* (training leading to a diploma, *brevet, certificate*) and *formation qualifiante* (continuing training, not leading to a certification, but valued by employers for employment purposes). It should be mentioned that some French-speaking countries have adhered to the term 'qualification' as used in the English-speaking context. Examples are Tunisia and in the European Union, Luxembourg. The Tunisian NQF is called *Classification Nationale des Qualifications*, whereas Morocco's NQF is named *Cadre National des Certifications*.

Luxembourg also uses the terminology 'qualification', as defined in English-speaking contexts, as emphasised in the referencing report of the Luxembourg NQF to the EQF. This clarification is worth noticing:

One of the features of the CLQ (Cadre Luxembourgeois de Qualifications) concerns the terminology it uses. Although the French word ‘certification’ is used in the official European texts as the equivalent of the word ‘qualification’ in English, here in the Grand Duchy, further to the initial discussions on developing a national framework, we have preferred to opt for using the word ‘qualification’ in French, because this both includes the notion of certification and establishes a link with the employment world (Gouvernement du Grand-Duché de Luxembourg, 2012, p. 17).

Figure 19 provides a high-level summary of the similarities and differences across English- and French-speaking countries. It is hoped that this summary can be expanded in the ACQF process to include other nuances in the interpretation and use of key qualifications concepts.

Figure 19: Anglophone and francophone views of NQFs and qualifications



Source: Adapted from an earlier diagram prepared in consultation with Borhene Chakroun, James Keevy, Kayllash Allgoo, Patrick Werquin, Anne-Marie Charraud and Herve Huot-Marchand

Most of the French-speaking countries in Africa adhered to and implemented the LMD system (Licence Master Doctorat), based on the three-cycle structure of degrees, underpinned by a credit system. Two directives of regional scope have been enacted establishing the LMD system:

- Directive 02/06-UEAC-019-CM-14 of 10 March 2006: organising higher education studies in the Economic and Montary Community of Cenrtal Africa (CEMAC) space in the framework of the LMD system.
- Directive 03/2007/CM/UEMOA of 4 July 2007: adopting the LMD system in the universities and hihger education institutions in the West African Monetary and Economic Union (WAEMU, also known under the French acronym, UEMOA).

This mapping study took stock of a range of qualifications with common understanding elements in many French-speaking countries: Certificat d'Aptitude Professionnelle (CAP), Baccalauréat, Brevet of Higher Technician (BTS), Diplôme Universitaire de Technologie (DUT), Diplôme d'Études Universitaires Générales (DEUG), Diplômes d'Études Universitaires Professionnelles (DEUP), Diplôme Universitaire d'Études Scientifiques (DUES), Licence (Academic, Professional, Technology), Master (Professional, Academic, Specialised), Engineering Diploma. But common designations and reference points do not necessarily mean full comparability of qualifications in different countries. The structure of education cycles and institutional organisations in each country determines different outcomes of learning associated with qualifications sharing similar designations across countries.

Competence-based approach in TVET systems

Several French-speaking countries have adopted a competence-based approach to TVET programmes and qualifications. Morocco and Tunisia have engaged with the APC for more than a decade, developing a large number of TVET programmes (all levels) and comprehensive methodological packages. The APC tradition is well anchored and was supported by several rounds of partnerships and technical assistance with Canada. In the case of Cameroon, the APC reform started in 2004 and has been applied to the design of the majority of programmes of secondary technical education. Implementation of APC-based training is not always granted after the collection of standards, programmes and assessment has been approved for new profiles and specialisations. There are several reasons for this, ranging from institutional preferences to high technical and pedagogical requirements to make these programmes operational at providers' level. The APC is not the sole learning outcomes-based approach to TVET, as the case of Morocco exemplifies.

4.5.2 Countries with Portuguese traditions in education and training

Four of the five Portuguese-speaking countries in Africa have adopted and are developing or implementing NQFs. This mapping report provides ample evidence on NQF trends and achievements in Angola, Cape Verde and Mozambique. Guinea-Bissau started developing its NQF in 2020, supported by international partners. São Tomé and Príncipe is conscious of the interest to start a roadmap towards its NQF, and the ACQF process is likely to contribute to support this motivation. The concept of 'qualification' applied in these countries does not differ from international definitions used in this report.

In other dimensions of their qualifications systems, these countries share some similarities – especially the three-cycle structure and credit system of the higher education degrees (Cape Verde and Mozambique); and the use of the competence-based approach (APC type) for TVET (Cape Verde and Mozambique). The level descriptors of the NQFs are broadly shared: Cape Verde and Mozambique have both opted for the combination of three domains: knowledge, skills, and responsibility and autonomy. Some differences can be noted in the structure of the NQF (Cape Verde is the only case with the eight-level structure) and in the greatly differing architecture of TVET systems (levels and institutions).

In these countries, the NQF is evidently one of the components of the wider SNQ, not a separated or isolated policy instrument. The NQF works together with the other essential instruments and components – the national catalogue of qualifications, the quality assurance system, and the system of validation of non-formal and informal learning. This systemic attachment of the NQF is defined in policy documents and the legal basis and is put in practice by the governance set-up. The NQF experience of Cape Verde is the most advanced and shows how the NQS coordination body embraces all the above-mentioned components. The case of Mozambique has the particularity that the qualifications framework experience so far has been based on sectoral frameworks (TVET and HE). Nonetheless, the TVET qualifications framework is a component of the wider system of quality assurance and governance of TVET, and the HE qualifications framework is closely linked with the system of quality assurance (evaluation and accreditation). Angola is following the same systemic approach in conceptualising and designing its NQF – various components and instruments converging together. The three country reports (Angola, Cape Verde and Mozambique) included in this mapping study provide ample evidence of this view of the place and role of the NQF in the wider system.

The NQF fulfils objectives of a domestic nature, but is also clearly oriented to position the countries' qualifications and levels in the relevant regional context. References to this international comparability and integration role of the NQF are clearly specified in the legal basis of the NQF of Cape Verde and integrated NQF of Mozambique. The former is eager to align and compare with the EQF and cooperate with frameworks and systems in ECOWAS. At the same time, Mozambique is focused and oriented to SADC and the commitment to align the NQF with the ten-level structure of the SADC RQF. The current NQF reflection process in Angola is aligned with the SADC RQF too

4.6 Overview

Chapter 4 has provided a snapshot of international considerations that are important for the ACQF process. The chapter has shown clearly that qualifications framework development, including both NQFs and RQFs, is an important global phenomenon and that the African continent stands to benefit from not only being part of this process, but also in leading new developments in this area.

As a continent that already has two RQFs, the SADC RQF and EAQFHE, and a range of developed and developing NQFs, Africa presents the qualifications framework community with an interesting dilemma. Will the ACQF be unique in its scope and purpose, or will it become another RQF, in the mould of the EQF and AQR? Considering the various recognition schemes that complement qualifications frameworks, as described in this chapter, Africa is well prepared to consider a multidisciplinary approach that draws on nearly 30 years of qualifications framework developments internationally. If the ACQF is to become a fifth-generation framework, these lessons will have to be carefully interrogated, and the gaps identified in this mapping report will have to be carefully investigated. One of these gaps is the complexity and the opportunities of the diversity of traditions, concepts and structures of qualifications on the African continent. As shown in this chapter, these similarities and differences can be considered to ensure that the ACQF process benefits from the diversity of existing developments.

We now turn to this next phase of the ACQF as we provide reflections on the mapping study itself, but more importantly, the key findings from the study, and then also some initial considerations for the process going forward.



5

LOOKING TO THE NEXT PHASE OF QUALIFICATIONS HARMONISATION IN AFRICA

Key points

- ▶ There are a handful of African countries that have elements of qualifications structures and/or systems which may not be identified as explicit qualifications frameworks. In such cases, a differentiated modernisation process could be of great value and allow the systems to become more learning outcomes-based and become more familiar with some of the international terminology being used.
- ▶ Limited technical capacity at national and regional levels often means that function and strategy are weakly defined and soon overtaken by form and structure. This leads to weak policy implementation and mission drift. The technical support required for qualifications framework development, across national, regional and continental levels, is an area that requires serious consideration.
- ▶ Although there is strong international evidence of National Qualifications Frameworks (NQFs) being aligned to Regional Qualifications Frameworks (RQFs), very few African NQFs have been involved. The well-established European Qualifications Framework (EQF) has become a de facto reference point for many established NQFs, and also for RQFs.
- ▶ Understanding and leveraging the interplay between emerging RQFs in Africa, the various NQFs across Africa, and the proposed African Continental Qualifications Framework (ACQF) will be a critical factor for future work in this area. While NQFs are quite distinct in their orientation and purpose, it is the potential overlap between the RQFs and the ACQF that is of concern.
- ▶ Africa, with its strong youth dividend, is poised to grow economically in the future and even overtake other continents that have long been more developed. A harmonisation strategy for Africa, whatever form it takes, must be environmentally and economically sustainable. If the ACQF is to become a new-generation framework, sustainability will be integral to its design, as much as its digital, green and social inclusion orientation.
- ▶ The ACQF could set the global benchmark for a new-generation qualifications framework based on a convergence of recognition methodologies, a move towards digitalisation, greater level of interoperability, and the realisation of independent reference points. The ACQF has the potential to infuse a learning ecosystem approach that has only been envisioned to date, building it from the outset from a learner perspective, and to become a de facto legal framework for Africa.

5.1 Introduction

In this last chapter, we return to the initial purpose of the mapping study as we summarise our findings and recommendations for the future harmonisation efforts that will undoubtedly be pursued in Africa, and also globally. As set out in Chapter 1, this report was commissioned by the African Union Commission (AUC) and work has been initiated in partnership with the European Union (EU), the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and the European Training Foundation (ETF) as a key output of the Skills for Youth Employability Programme. The report specifically presents the key findings of the mapping study of qualifications framework development in African countries, conducted in 2019 and 2020, which covered qualifications frameworks at different stages of development, consolidation and implementation.

A few contextual factors are also important to keep in mind. Firstly, the finalisation of the report took place during the peak of Covid-19 – this worldwide pandemic did not leave Africa untouched, and while its full impact is yet to be determined, it is clear that learning, jobs, lives and livelihoods will be impacted upon, with a strong move towards more agile packages of learning that can lead to employment. Secondly, it is important to recognise that the ACQF process has been preceded by many decades of national, regional and continental efforts to strengthen qualifications and quality assurance systems. In many cases, higher education has led the way, such as through the Pan-African Quality Assurance and Accreditation Framework (PAQAF), but Technical and Vocational Education and Training (TVET) and schooling have also developed in many aspects. This existing tapestry of systems, policies, projects and programmes provide a foundation for the ACQF that is simultaneously diverse and complicated. As a continent, Africa represents the diversity of anglo-, luso- and francophone traditions, as well as strong Arabic influences. Qualifications systems have therefore naturally followed in these traditions, but with a strong drive to be contextually relevant and truly African. While there are exceptions, these developments have strongly supported the AUC vision for the ‘Africa we want’ and from critical components of the Continental Strategy for Africa 2016–2025 (CESA) (AUC, 2019c) and the Continental Strategy for Technical and Vocational Education and Training (AUC, 2018a). The recent agreement on continental free trade through the African Continental Free Trade Area (AfCFTA) further provides impetus for continental mobility and the vision for a common continental qualifications system. Thirdly, there has been increased focus through global developments in the area of qualifications. The Global Convention on the Recognition of Qualifications Concerning Higher Education (UNESCO, 2019) is a key example, while the thinking on World Reference Levels (WRLs) (Hart & Chakroun, 2019) may be an outlier, but is certainly drawing the attention of the international qualifications and skills community.

5.2 Opportunities and limitations associated with the mapping study

A mapping study, as the one being reported upon here, necessarily has limitations, as well as new opportunities. What is important is that these aspects are carefully considered and their impact ameliorated through the use of multiple sources of data, the verification of findings by countries and Regional Economic Communities (RECs) and, critically, a review process that allows all interested parties to contribute, agree and also disagree in some cases. In this regard, the mapping study aims to provide policymakers and researchers with a firm foundation for the planning and design of what will come next. The methodology consisted of the components listed below, each with associated comments on their opportunities and limitations.

5.2.1 Organising framework

A set of eleven thematic areas, ranging from the legal and policy bases of qualifications frameworks to the dissemination, communication to end-users and the role of RQFs in supporting development at national level, which are broadly aligned to the categorisation and analysis of qualifications frameworks, provided the organising framework for the analysis, and the structure of the mapping report (GIZ, 2019). The thematic areas proved useful for the analysis of NQFs overall, but perhaps slightly less so in the case of RQFs. Overall, the thematic areas were well utilised, including in the design of the online survey and the structure of the analytical framework, which is included in the mapping report as a live tool that can be updated as the ACQF process unfolds. The application of the thematic areas highlighted those that are well described and have accessible information (such as on governance and scope and structure of NQFs), as well as areas with much more limited information (such as on financing and end-user communication).

5.2.2 Theory of Change

A Theory of Action, and an early Theory of Change (ToC), was utilised for the ACQF process. The initial ToC was based on the interactions with stakeholders and the ACQF Advisory Group during the launch workshop in September 2019 in Addis Ababa, and foregrounded the relevant CESA indicators (AUC, 2016) applicable to the ACQF: 'Existence of a National Qualifications Framework' (4.2), 'Inbound Mobility Ratio' (9.4) and 'Outbound Mobility Ratio' (9.5).

The ToC approach was not well known in the sector and its utilisation proved limited. It is hoped that the further phases of the ACQF process will take this seriously and allow for further iterations of the ToC to be developed to keep the process focused and also measurable. It is strongly recommended that the ACQF itself will be premised on this evolving ToC and that this thinking will influence NQFs and RQFs across the continent. External evaluations, such as the one conducted in 2018 (Jitsing et al., 2018), provide important pointers in this regard.

5.2.3 Desk research

A traditional but very necessary component of the ACQF mapping study was the desk research of a collection of relevant information and data from published sources, which was gathered and subsequently categorised in an online ACQF inventory.

A paucity of publications, more so online resources, is a well-known limitation in the African context, and so the inventory is an important development that could be expanded on in the future. Further quality assurance of the documents contained in the inventory is necessary and, of course, also regular updating with newly sourced documents.

The structure of the inventory is temporarily according to countries and RECs, but a more sophisticated structure based on the codification of the contents will be necessary. At present, the inventory is housed on Google Drive, but this too should be migrated to a more independent portal or website in the near future. There are several opportunities to explore in this regard, including the Skills Initiative for Africa (SIFA), Africa's Platform for Youth Employment and Entrepreneurship (ASPYEE) portal, the early-stage portal of the Southern African Development Community (SADC), as well as more independent project-based solutions that may be more agile in the early stages of the ACQF process.

5.2.4 Online survey

The online survey in three languages – English, French and Portuguese – was developed using a Google Form and was structured according to the eleven thematic areas mentioned above. An ACQF contact database was developed, based on an initial database received from the AUC, and it represents an important resource for the project going forward. Basic information on the state of play and perspectives from 29 member states was gathered, to which complementary data were received from Cameroon, Nigeria and Côte d'Ivoire, using the survey tool, although this was received after the completion of the survey. Overall, the survey proved very effective, with an unheard-of response rate of 75% (29 out of 39 members states that were approached). This can largely be ascribed to ongoing support and awareness raising that started with the Advisory Group meeting in September 2019, followed by ongoing communication from the ACQF project team. The initial survey link was sent in November 2019 and the deadline for submissions was extended to the third week of December 2019. The wide range of resources submitted by respondents during the survey has been included in the ACQF inventory. Using the same survey instrument, late responses were also received from new countries (Chad, Ghana, Republic of Congo and Zimbabwe). Total participation: 33 countries and 43 responses.

5.2.5 Technical field visits

Technical field visits collected more detailed information on NQFs from ten countries (Angola, Egypt, Ethiopia, Kenya, Morocco, Mozambique, South Africa, Togo, Senegal and Cameroon) and RQF developments in three RECs – the East African Community (EAC) and the Inter-University Council for East African (IUCEA), the Economic Community of West African States (ECOWAS) and SADC. The countries were chosen using a sampling framework with four criteria: coverage of the four languages spoken in Africa (Arabic, English, French and Portuguese); coverage of different stages of development and implementation of NQFs; coverage of different African geographical regions; and links with the three RECs with more advanced RQFs (SADC, EAC and ECOWAS).

Overall, the field visits were well organised and fruitful, although some exceptions required the research team to improvise during in-country periods. The fact that the experts were familiar with the countries they visited proved invaluable and contributed to the development of the thirteen comprehensive working papers that have been sent to the respective countries and RECs for further review and validation. The hosting of these reports on an electronic platform will add further value and will enable more open access across member states. The utilisation of the working papers in the Global Inventory is certainly also an opportunity that should not be missed. The technical visits were all completed before the escalation of the Covid-19 pandemic, which allowed for focused desktop work and the hosting of three webinars in May 2020. It is evident from the data gathered that field visits are critically important in studies of this nature. The possibility of expanding such visits, using local experts to all the remaining African Union (AU) member states, is strongly recommended for the second phase of the ACQF process. The ACQF project started elaboration of two new country analyses (on Ivory Coast and Nigeria) in late 2020.

5.2.6 Peer learning and exchanges among actors of African NQFs

Peer learning activities via webinars have replaced the planned conventional workshops in 2020 because of Covid-19 constraints. This crisis has in fact enabled a much more frequent and active

interaction between ACQF stakeholders, via structured webinars for peer learning, organised as part of the capacity development component of the ACQF project (seven webinars between 2 July and 29 October 2020). Participants represent the ACQF Advisory Group, the African countries and RECs, and other constituencies – state institutions and parastatal agencies, research community, experts and international partners. The peer learning activities are generating dialogue and mutual trust, as well as allowing the collection of updated information on the status and recent developments of NQFs, which was integrated in the analyses of the mapping study, notably in the SADC report, the Angola report and this final mapping report. The seven webinars shared updated information and perspectives on seventeen NQFs (Africa, Europe, Middle East) and five RQFs (Africa, Europe, Middle East and Asia), with an average of more than 70 participants per webinar.

A capacity building programme was included in the mapping study, based on the JETStreaming model that has proved very successful in the South African context. The original intention was to provide opportunities for ten young researchers for a period of three months, by working from their respective regions across the continent, and to support the research team in data collection and stakeholder engagements. Being forewarned that this would prove difficult, the approach soon became constrained by the multiple approvals required by the various RECs. The strategy was soon amended to try and place five young people for six months.

5.2.7 Stakeholder consultations

Despite the limitations linked with Covid-19, the interactions with stakeholders have been continued, in the form of webinars: three in May, dedicated to the preliminary results of the ACQF online survey, and seven during July to October focused on peer learning and exchanges on qualifications frameworks. Country and RECs included in the technical field visits were also engaged with directly and requested to review their reports. Looking back over the period, more consultations could have taken place, but what was done was probably sufficient for Phase 1 of the process. The early development of an ACQF infographic was a step in the right direction. An independent project website with basic functionality will go a long way to fast-tracking this process and could be successfully integrated into the formal platform once it is ready.

5.2.8 Analysis of qualifications

The analysis of qualifications from the hospitality, accounting and coding sectors from Kenya, South Africa, Botswana and Namibia, through a matching of learning outcomes to European Skills, Competences, Qualifications and Occupations (ESCO) criteria, proved an important, but very new and underdeveloped contribution to the mapping study. The methodology was adapted from the European Centre for the Development of Vocational Training (CEDEFOP) analysis in 2017, and additional tools. It is important to note that African countries, namely Mauritius, Namibia, Tunisia, South Africa and Zambia, were included in the CEDEFOP study, which focused on four qualifications profiles: bricklayer, hotel assistant, healthcare assistant and ICT service technician. The overlap between the CEDEFOP (2018a) study and this mapping study is unfortunately quite limited, with only the hospitality/hotel assistant qualifications from Namibia in common. Keeping in mind that different qualifications may have been profiled, the CEDEFOP study found a 100% match with ESCO, while the ACQF mapping study found only a 25% match. This variance does not inspire confidence in the reliability of the methodology, but will have to be analysed in more detail before this can be confirmed. Unfortunately, the human bias in the

qualitative allocation of the matching is quite a significant factor, while ESCO itself provides a strong counterbalance:

The strength of the ESCO terminology lies in its detailed approach, operating at a level of granularity making it possible to analyse which specific skills and competences are being addressed by each single qualification (Bjørnåvold & Chakroun, 2017, p. 17).

The automation of the matching process with ESCO, as is currently being developed, should further assist in strengthening the methodology. Besides lessons and findings from the comparison of qualifications carried out in 2015 in partnership between CEDEFOP, the ETF and UNESCO, the ACQF mapping applies a novel approach based on semi-automated linking of qualifications with the renewed ESCO skills hierarchy, annotating and comparing qualifications. To this end, the ACQF project has joined the second phase of the ESCO linking project, started in June 2020. This project activity, conducted in parallel with this mapping study, follows a different timeline of implementation and its final results will be compiled and released early in 2021. The collection of qualifications selected by the ACQF project for the pilot consists of over 60 cases from five countries, of which four have operational NQFs and online searchable qualifications registers. The selection of cases took account of the current sector priorities of the AfCFTA (financial services, business services, communication, tourism and transportation) and other sectors fundamental for economic diversification and growth (engineering, manufacturing, construction, agriculture, forestry, fisheries and veterinary).

The use of the findings of this novel approach to link qualifications to skills of the ESCO taxonomy is relevant for sectoral, national qualifications frameworks. Firstly, adding information on skills to qualifications can ease the review process of qualifications and strengthen the feedback loop between the labour market and education and training stakeholders. Secondly, building links between qualifications and skills taxonomies helps the comparison and consequently the transparency of qualifications from different sectors and countries, much needed in view of the objectives of regional and continental portability of skills/qualifications, mobility of labour and economic integration. Finally, cross-border job matching in the context of regional/continental integration can benefit from more transparent skills content of qualifications.

Critically, the development of an African classification system and/or a more neutral international system can assist the broader international community to further develop this process. The WRLs (see Chapter 4) is one example of pioneering work currently underway to try and address this problem.

5.2.9 Comparison of level descriptors

The last component of the mapping methodology was a comparison of level descriptors, which drew on the methodology employed in SADC in 2017, and included the regional level descriptors from the SADC RQF, the Association of Southeast Asian Nations (ASEAN) Qualifications Reference Framework (AQRF) and the EQF, as well as descriptors from NQFs in South Africa, Botswana and Lesotho. The methodology was adapted to exclude the cognitive dimension of the Revised Bloom Taxonomy, while the smoother curve representation was replaced with a 100% stacked column option. The adjusted methodology was applied to eight countries and two regions, namely Cape Verde, The Gambia, Senegal, Egypt, Botswana, Mozambique, Kenya and Ghana, as well as SADC and the EAC. The countries and RECs in common across the two studies are SADC and Botswana.

5.3 Findings of the mapping study

5.3.1 Considerations for qualifications development in member states

The eleven thematic areas used as organising framework for the mapping study were applied to the thirteen countries and three RECs included in the technical field visits. This data was supplemented from the online survey, the desktop study, as well as additional submissions from Zimbabwe, Ghana, Democratic Republic of Congo, Chad and Nigeria. The findings were presented in Chapter 3. In this final chapter of the mapping report we synthesise the main findings and formulate these as key considerations for African member states.

#1 Fit-for-purpose qualifications systems in Africa

In Chapter 3, it was notable to see the wide range of member states with legal and policy bases for their NQFs, although these countries were mostly from southern Africa, and a few others sparsely distributed in the east (Ethiopia and Kenya), the north (Egypt, Tunisia and Morocco) and the west (Cape Verde and Senegal). Also in Chapter 3, when looking at the vision and scope of NQFs in Africa, it became evident that many more member states were contemplating the development of NQFs. Southern African member states, including the SADC RQF, have been implemented for a longer period and, as a result, have more mature legal and policy bases in place. More recent developments in East Africa, notably in Kenya and to some extent Ethiopia, are noteworthy, while in the north, Egypt, Morocco and Tunisia have made progress. Some West African countries, notably Cape Verde, Ghana, Senegal, are also at more advanced stages. This continental trend is a significant finding of the mapping study and closely resembles earlier trends in Europe, and perhaps a similar trend currently underway in parts of Asia and the Pacific.

Discussion and exchanges unveiled NQF dynamics of different types and pace. The mapping study uses five stages to categorise the different situations of qualifications frameworks' development and consolidation:

1. Qualifications framework not in place, the development process is not started.
2. Qualifications framework at the early thinking stage (first steps).
3. Qualifications framework in development and consultation with stakeholders and experts.
4. Qualifications framework in place, approved as a legal Act, implementation started.
5. Qualifications framework in implementation for some time, reviewed, improvements adopted.

In the period of the mapping study, some countries moved to early steps (Cameroon), others from early thinking stage to tangible steps of analysis and consultation towards an NQF (for example, Angola, Sierra Leone and Somalia). Other countries are now moving from sectoral frameworks – Technical and Vocational Education and Training (TVET), higher education (HE) – to establishing integrated, comprehensive NQFs (for example, Malawi, Mozambique and Rwanda). Two countries have moved to stage 4, following official approval of their NQF (Lesotho and Eswatini). In West Africa, Cape Verde revised all the main legal-regulatory Acts related with the NQF in 2020 and moved to the stage 5. The question that begs an answer is: what is driving this trend? And linked to this, should all member states even be considering following the trend?

Two important considerations are relevant here. The first is the differences between anglo-,

lusophone and francophone countries and Arab states. As discussed in Chapter 4, the histories of these African countries have left them with very strong influences, which permeate their education systems and govern their responses to contemporary pressures of managing migration, skills supply and the modernisation of their systems. The international trend towards NQFs, coupled with the strong strategic intent from the AUC through Agenda 2063 for harmonisation and the many regional strategies towards coherence and integration, does not leave much scope for alternative solutions. While NQFs are certainly not quick fixes, they have offered many countries and regions a system to organise their qualifications within the frame of an internationally comparable system. This has been effectively demonstrated over the last four decades.

The second consideration is the evolution of these frameworks into what is referred to as 'fifth generation' in Chapter 2. Even if countries opt to develop NQFs, the question is whether they pursue the problematic policy-borrowing route or embrace the latest thinking and leapfrog into credentials systems that are more agile, more digital and more decentralised. Of course, context matters greatly and even more so when looking at the diversity across Africa. On the negative side, such an ambitious move could destabilise current developments and, in fact, even increased policy borrowing as African countries play catch-up in an area that other parts of the world are further advanced in. Based on policy and peer learning (not borrowing), African countries may very well go beyond what earlier generations of NQFs have been able to achieve and move ahead in a concerted, even harmonised, manner that other regions have not been able to do. A pragmatic approach will be a compromise and require careful weighting of the pros and cons. The pragmatic route will be one in which current NQF developments are consolidated, become more adaptable and responsive to mega-trends and transformations taking place globally and on the continent (digital, green skills, skills for the future, and so on). Practically, this could take the following forms:

- Level descriptors reflect the mega-drivers of skills and qualifications and are explanatory in their role supporting renewal, coherence and transparency of qualifications.
- Qualifications for lifelong learning, micro-credentials are part of NQFs and articulated.
- Qualifications can be achieved via validation/recognition.
- The existing objective of parity of esteem of academic and professional, formal and non-formal-informal learning needs to be placed at the core of NQFs.
- NQFs are governed in partnership approach, based on evidence, feedback and analysis.
- Digital management and award of qualifications becomes a normal standard of all NQFs, using open source technology, which in turn facilitates comparability, quality assurance, recognition, data analytics on mobility and tracking.

Importantly, these options are presented as considerations for policymakers and leaders in Africa, so that they can make informed decisions.

It is also important to take into account that there are a handful of African countries with all or several elements of qualifications frameworks, which may be identified as *implicit*, rather than *explicit* qualifications frameworks. In such cases, the trend towards the development of NQFs should be guided by the national development agenda, while taking account of the level of regional integration or of cross-border mobility, which require transparent and comparable qualifications frameworks. Knowledge of the NQF experiences and paths in different countries, neighbouring and in other regions and continents, has high value for the working groups and institutions coordinating the national thinking and analysis of the preferred options for the NQF.

In such cases, a modernisation process could be of great value and allow the systems to become more learning outcomes-based and become more familiar with some of the international terminology. Such a transition should be managed with great care and should not be costly. The inherent risk of the political intent to develop an NQF, based on global trends, often detracts from this more reforming purpose of an NQF (see Chapter 2). Very few countries, South Africa probably being an exception, should even consider a strong transformational approach, which comes with huge risk, cost and takes a long time to implement (Jitsing et al., 2020).

Perhaps one of the most important objectives of an NQF, as reported by numerous countries, is promoting the mobility, permeability and portability of qualifications. Graduate entry into, and mobility within, the labour market is also an important hallmark of a functional NQF. Mobility is also related to the progression routes offered in an education system and thus, with clearer progression routes, learner and career mobility will improve. This is due to the fact that with multiple and easier progression routes, learners will find themselves moving more easily and seamlessly on their career pathway. In theory, it will also become easier for learners to upgrade their skills, knowledge and competencies in accordance with the changing needs of the education and labour markets. In order to facilitate greater mobility, employability and competitiveness, such NQFs should play a role in the alignment and comparability of the qualifications offered in the country with RQFs and other qualifications offered on the African continent and in the world.

In many countries, an NQF would provide a more integrated approach to the education system. This means that there would be better coordination and harmonisation and thus coherence in the system. This integrated approach should cover all sections of the education system in a country, including adult education, basic education, TVET and HE. Importantly, for one country, it was expected that with an NQF, there would be a harmonised nomenclature for higher education, which speaks to a common vocabulary in the education sector. Thus, countries see the objective of the NQF as the development of a single, integrated national framework for learning achievements. In this regard, it is proposed that an NQF should facilitate the understanding and articulation of the different qualifications, within a harmonised and integrated framework of the qualifications offered in the various sub-systems of a national education system, promoting competence-based education. The intended objective of many NQFs is to improve the understanding of learning and qualifications and how they relate to each other. Thus, the defining of outcomes and therefore agreeing on standards is very important in this regard. Principles and guidelines for the assessment and recognition of professional skills are important components of the NQF. One response mentioned that the objective of an NQF is to enhance and coordinate the quality of education and training by setting standards across levels of qualifications in the different education subsectors. Without agreed-upon standards for education and training that are applied consistently, it becomes challenging to understand different qualifications and their relation to each other.

Most countries report that the NQF is central to the comparability of qualifications. An objective of an NQF would be to define parameters and criteria to facilitate the comparability of qualifications within a national education system. The international recognition of local qualifications (and vice versa) is seen as an important function of an NQF, with one country mentioning the internationalisation of its education sector. Given that one of the objectives of the ACQF is to increase parity of qualifications among countries and increase the mobility of learners and workers, it would be vital for countries' NQFs to factor in the recognition of international qualifications. Another objective of an NQF that was reported was to create a reference for the

equalisation of academic and professional competences that serves for the attribution of equivalences. For many countries, the NQF is seen as a bridge that links training offered in the education sector and the needs of the market. For some countries, one of the objectives of an NQF is to ensure that qualifications are relevant to perceived social and economic needs. The NQF is also seen to play a role in promoting and regulating the development of qualifications based on unit standards, which are linked to the workplace and society's requirements. In summary, NQFs are important internationally accepted systems that are used by more than two-thirds of all countries across the world. African countries follow this trend, but great care should be taken to build on what exists and, critically, to develop and modernise their systems in a manner that is fit for purpose and contextually adequate.

#2 Legal and policy foundations for NQFs: Make information accessible

The mapping study has shown a strong preference for a legal basis for NQFs in Africa, in line with the international trend. A few trends in this regard are important to note. Firstly, considering the relatively high number of NQFs that are being developed, more discussion documents would have been expected. Despite the combination of the online survey, field visits, desktop review, and even the placement of the young researchers at two RECs, these types of pre-legislation documents were scantily distributed. Language is a consideration in this regard, although the research team could converse in English, French and Portuguese. Limited connectivity in parts of Africa should also be considered, although there is clear evidence that cell phone penetration is extremely high on the continent. Overall, it would be good to encourage countries that are moving towards the formalisation of NQFs through legislation and policy to make a more concerted effort towards the public and electronic dissemination of founding documents and research that form the basis for what will follow later. The ACQF inventory will hopefully assist in this regard, as well as a platform for the ACQF project. The additional country analysis of the qualifications systems/frameworks of Nigeria and Côte d'Ivoire, which had been initiated by the ACQF project as this mapping report was being finalised, but fell outside the scope of Phase 1, is a good example of the remaining country data that can be accessed and made more public for the benefit of the continent. The ACQF project will continue expanding the countries' baseline analysis and data, using a common approach and national expertise.

Many countries purported to be at the first developmental stage of NQF development. However, the availability of documentation to support this was extremely limited, as mentioned above. What is important in this regard is also the measure used to determine the stage of NQF development. In the mapping study, we utilised a scale from 1-not in place to 5-in place for some time and reviewed, as outlined above. The more detailed cyclical categorisation (explorative, design, adoption, activating, operational, review) (Deij, 2019) is also useful. Experience has demonstrated that any form of categorisation will inevitably be contested and so care should be taken not to ascribe too much importance to this. It may be better to use a more developmental, self-reported mechanism that allows for mapping, but does not become the main focus of the exercise. The reporting structure in the Global Inventory (CEDEFOP et al., 2019a, 2019b) also contains some useful examples.

It was evident from the country reports that in many cases, the early stages of NQF development often progress reasonably well, but legal establishment is one of the biggest hurdles. Early-generation NQFs seem to have moved very quickly between these stages, including the early adoption of policy and legislation, while in later stages (see Chapter 2), many countries do not get beyond this stage. A key determinant in this stage is the political will and leadership to move the

NQF from concept to policy, and from policy to practical implementation and delivery of results. The extended time it takes to move through these various stages, ranging from a few years to even decades, is mostly accompanied by shifts in political leadership. In the absence of a strong bureaucracy in education and labour departments, such shifts simply mean that the process is delayed and sometimes even abandoned. The important point is that more publicly accessible information, and a wider consultation process that includes state and non-state actors, can create a momentum that is less impacted by political changes. A further consideration in this regard is the role of the AUC and RECs, specifically when it comes to technical and policy support. Several regional initiatives have certainly supported member states with NQF development on a policy level, but the technical capacity building is mostly lacking, leaving member states with good intentions, but without the means to operationalise such policies.

#3 Governance of NQFs: Form and function

The well-known adage in strategy development is that form should always follow function, or similarly, structure must follow strategy. The challenge in many member states is that the limited technical capacity at national and regional levels often means that function and strategy are weakly defined and are soon overtaken by form and structure. This leads to weak policy implementation and mission drift. In the case of the ACQF, the AUC's First Ten-Year Implementation Plan (AUC, 2015b) juxtaposes the target of a fully operational African Education Accreditation Agency (AEAA) with that of a common continental education qualifications system, both set to be reached by 2023.

What is known from the mapping study, and international experiences, is that NQFs are managed in the main by qualifications authorities, quality assurance agencies, NQF coordination units and, in some cases, directly by ministries. For NQFs at earlier stages, the oversight role is mostly assigned to a ministry of education, labour or TVET, whereas for more advanced NQFs, qualifications or accreditation agencies are established under these ministries. In some cases, these bodies are national and in other cases they focus exclusively on sectors, such as Higher Education or TVET. The roles of social partners and other stakeholders are important in these governance mechanisms, but are not always evident in the available sources. In the case of RECs (see the next section), governance systems of the emerging RQFs are more loosely structured, although there is some variation, with the SADC Technical Committee on Certification and Accreditation (TCCA) proposing an implementation unit to oversee the implementation of the SADC RQF. The risk of a multiplicity of agencies with overlapping mandates is very real, more so in countries with sparse resources, and the international trend, outside of Africa, is certainly towards increased trimming and integration of agencies. The impact of Covid-19 on state resources across the world will undoubtedly accelerate such policy decisions.

#4 NQF architecture: Strong convergence to learning outcomes and parity of esteem

The mapping study clearly illustrates a strong convergence of NQFs to eight to ten levels, with level descriptors and three to five domains, mostly those of knowledge, skills, autonomy and responsibility, and competence. The universal move towards the use of learning outcomes and the extent to which quality assurance of learning has changed is well captured across member states. For some countries, the NQF is seen as being vital in linking the different components of the education system, such as TVET and general education, thus enabling smoother progression routes. This would, in theory, result in improved horizontal as well as learner and career mobility.

This intention to provide multiple pathways, so that learners are encouraged to upgrade their skills, knowledge and competencies to respond to the changing needs of education and the labour market, is a strong trend across all submissions.

There is also an increasing interest in the establishment of agile and credible policies and mechanisms of validation of non-formal and informal learning – Recognition of Prior Learning (RPL), Validation des Acquis de l'Expérience (VAE) and Recognition, Validation and Certification of Competences (RVCC). The mapping study identified a number of systems and experiences that contribute to wider and more inclusive access to qualifications (full and part), for persons of diverse demographics and schooling experiences. The ACQF country reports found that VAE, RVCC and RPL have reached a differentiated degree of integration and visibility in education and training policies and qualifications systems. In some countries, the qualifications framework is welcoming to non-formal and informal learning, and regulatory-technical implementation mechanisms and capacities are in place or development.

The majority of countries with qualifications frameworks are developing unified or national frameworks, even if sectoral frameworks are in place. TVET and higher education are the two sectors where sub-frameworks are found, while none are presently known in general education. This may be due in part to the relatively few qualifications found in general education, as well as the reasonable well-established school inspection systems. Regional examinations, such as in West Africa, are also especially important and provide a very strong foundation for NQF and RQF development, and potentially also for the ACQF itself.

The mapping study confirms the uniform shift towards the use of learning outcomes across the TVET, higher education and schooling sectors in Africa. This shift to learning outcomes-based qualifications is essential as well for validation of non-formal and informal learning. The online survey showed that the more established NQFs have some form of RPL included, but overall, the inclusion of formal, non-formal and informal learning on NQFs is very limited. As discussed in earlier chapters, it seems that the new generation of qualifications frameworks may be more able to take diverse forms of learning into account, whereas the earlier generations made this costly and rather complicated. There are exceptions, but member states developing NQFs would do well not to become overly preoccupied with RPL as understood in earlier periods, and rather to consider what is now possible using technology, even in areas with low connectivity. The evaluation of foreign qualifications, a function performed in most countries, can also be improved and harmonised through the use of learning outcomes and automation. Other examples have been developed to manage migration (ILO, 2020c) and can be adapted as may be necessary.

With most of the current and emerging NQFs having their roots in TVET, there is a clear policy intent to improve the value of qualifications with a more vocational orientation. The lack of parity of esteem is a deep problem across Africa, more so in the anglophone countries, and NQFs are seen as an important mechanism to address this. Many of the NQF objectives provided in the online survey attested to this – for example, the following from the Mozambique definitions: 'Establish a framework for equivalence between professional training acquired in training institutions and outside – with the aim to recognise and valorise training in the labour market' and 'Provide a framework for equivalence between professional and general qualifications'. The Seychelles NQF likewise states: 'Ensure comprehensiveness in the recognition of learning and qualifications attained in the country, while ensuring parity for occupational qualifications'. This is, however, no simple matter to achieve. The historical TVET origin of NQFs often makes them less appealing to the higher education and general education sectors. New innovations, such as the Credentials Framework in the United States (Rein, 2016) and the WRLs (Hart &

Chakroun, 2019), provide new impetus towards addressing this historically intractable problem.

NQFs play an important role in the quality assurance of learning provision and assessment. They are also central in ensuring the quality of qualifications produced in a country, so that public confidence is built in both qualifications and graduates, and also in promoting a culture of quality within educational establishments at the general level. If the quality assurance mechanism functions correctly, the quality of education and training in a country can be improved. This relationship between NQFs and the quality assurance systems they are associated with is important, with some systems preceding NQFs and others being radically altered as a result of the NQF. The universal move towards the use of learning outcomes and the extent to which quality assurance of learning has changed is important for the ACQF discussion and will be explored further.

#5 Data and evaluation of NQFs: A major risk, but perhaps also an opportunity

NQFs tend to be very ambitious and their contribution to change is difficult to measure. Few countries on the continent, or globally, have attempted to formally review their NQFs and RQFs, and far fewer have been able to employ more sophisticated evaluation designs that are able to accurately measure impact (Jitsing et al., 2018). The vision and scope of the ACQF will have to be conceptualised to provide a continental vision, but also be realistic in what it can achieve, which in turn should be measurable. In the mapping study, we have set a trajectory for such an approach for the ACQF, aligned to the relevant CESA indicators (AUC, 2016), but only time will tell if the process will remain aligned to this initial intent. International experience has shown that this is seldom the case.

As was also shown in Chapter 3, in the section of qualifications management, both the *online survey* and the technical field visits identified very sparse information on how qualifications and their associated data are being managed across member states and RECs, with only very few exceptions. It was also pointed out that while many developing countries have tightened regulations on data privacy, Africa is lagging, and this exposes the continent and member states to considerable risk. The global trend towards increased automation, on the other hand, provides an opportunity for innovation to be introduced through the ACQF process that will benefit all involved. The development of continental schema for data, monitoring and analysis, such as taking place within CESA, can benefit from the new trends towards more open platforms and greater levels of interoperability (NUFFIC, 2020).

#6 The ACQF can act as a catalyst for CESA

The mapping study has shown in a very concrete manner that the ACQF, as convener of NQFs and RQFs across the continent, can act as a catalyst within the more harmonised landscape. Supporting implementation and renewal of qualifications frameworks at national and regional level is aligned to the CESA priority objective 4 (c and d) and the monitoring indicator 4.2 (Existence of a National Qualifications Framework) in particular, but also 9.4 (Inbound Mobility Ratio) and 9.5 (Outbound Mobility Ratio), as discussed in Chapter 1. The current work by the AUC on the CESA indicators and the platform through which data can be collected stands to benefit greatly from this possible collaboration. With regard to the ACQF, the alignment with CESA would avoid unnecessary duplication in data systems on national, regional and continental levels.

#7 Financing NQFs: Less is more

As expected, the cost and financing of NQFs was a strongly identified theme in the online survey, with a noted influx of development aid in support of qualifications framework development at multiple levels. Technical visits and the desktop review did not offer much more information, but what is evident is that NQFs do not have to be a drain on state resources. In many cases, after an initial period of external development aid, governments become responsible for the running of the NQF and its structures. If the early development stage was too ambitious, or simply just conducted in a too expensive manner, the legacy is carried through into the implementation stages, leaving countries with a policy instrument that may be well designed, but is too costly to implement. As mentioned in Chapter 3, new innovative private-public funding models (De Witt et al., 2020; Mawoyo et al., 2020) provide an important avenue to explore during the next phase of the ACQF process, but can also provide options to countries at present. Covid-19 could act as a catalyst for such new opportunities. Annexure 4 provides some suggestions that could be considered by countries and RECs, as well as for the ACQF process.

Linked to funding constraints is the strong trend towards prioritising the organisational structures required to oversee and operationalise NQFs. As mentioned above, these structures are often better designed than the policies they oversee and become inflated and key cost drivers. Duplication on a national level is often the result and can even be extended to overlap with regional structures. This is not a new finding, and care will have to be taken to support NQFs, RQFs and the ACQF process to steer clear from these pitfalls. Innovative financing mechanisms provide an important avenue for NQF and RQF developments, which to date remain relatively unknown and underdeveloped.

#8 Dissemination and communication for NQFs: Let's start with the end-user

The online survey responses showed that dissemination and communication to end-users is another key weakness across countries and RECs. This is also a common trend internationally, but this does not mean that it cannot be overcome. The increased trend towards online platforms, and the use of digital tools, further accelerated by Covid-19, pose a great opportunity to think differently and involve end-users in ways not previously possible. The new fifth generation of qualifications frameworks, as discussed a few times in this mapping report, will certainly be more digital and more focused on data privacy and digital identity. African NQFs, RQFs and the ACQF are well positioned to do things differently from how they were done in the past. This will, however, require a strong vision and courageous leadership – to do what has not been done before.

#9 Alignment and referencing: Perspectives from NQFs

Although there is strong international evidence of NQFs being referenced or aligned to RQFs (see Chapters 3 and 4), very few African NQFs have been involved. The current alignment process in SADC, where South Africa and Seychelles have completed their SADC RQF alignment reports, is a positive move (SADC Secretariat, 2019; SAQA, 2020; Mauritius Qualifications Authority, 2020; Seychelles Qualifications Authority, 2020). The well-established EQF, with longstanding experience and a renewed legal basis reflecting new demands (EU, 2017) has become a de facto reference point for many established NQFs and for RQFs. Some African countries have a political and economic interest to cooperate with the EQF. For instance, Morocco undertook a visit to a regular meeting of the EQF Advisory Group (in 2016) and the NQF legal Act of Cape Verde explicitly mentions the objective of cooperation both with the EQF and with ECOWAS. The

Council of the European Union in the EQF Recommendation of 2017 invited the European Commission, in cooperation with the EQF Advisory Group, to ‘explore possibilities for the development and application of criteria and procedures to enable, in accordance with international agreements, the comparison of third countries’ national and regional qualifications frameworks with the EQF’ (recommendation 13). This might undoubtedly facilitate or accelerate this process of cooperation. There are many risks associated with this relative dominance of the EQF but, in essence, it has evolved organically and, if managed strategically, could encourage non-EU countries and regions towards increased policy learning and tangible cooperation on qualifications frameworks. The ACQF itself will be influenced by both the EQF and the AQRF, and eventually take the shape and roadmap that suits the continent. This in turn, raises the important questions about the form and purpose of the ACQF. In addition, it is important to consider the interplay between RQFs, NQFs and the ACQF on the continent.

5.3.2 Considerations for regional qualifications frameworks in Africa

The mapping study has shown that there are a number of RQF developments underway and, in the cases of SADC and the EAC, the progress is the most advanced. The RQFs have been described in greater details in the stand-alone reports, as well as in Chapter 3. Following a brief summary of the two more advanced RQFs below, this section provides key considerations for African member states, RECs and for the AUC, as the ACQF process unfolds.

#10 Build on existing continental and regional initiatives

What is useful at this point is to briefly reflect on the main types of RQFs found across the world. The typology is actually quite simple, as the current RQFs, notably the EQF and AQRF, are both meta-frameworks that act as reference points for the NQFs in their geographical regions. The notion of a transnational qualifications framework (Keevy et al., 2010; COL & SAQA, 2008) has also been explored, as an international framework not limited by geographic constraints, but this has been slow in development. These meta-frameworks do not contain qualifications and are based largely on volunteer participation from member states. As shown in Chapter 4, this participation has grown over the years, and the EQF is now well established, with most member states having referenced and several going into a second cycle. The AQRF is less developed, but all signs are that the referencing process is well underway. In Africa, two countries have aligned (the preferred term) their NQFs to the SADC RQF. In all these examples, the RQFs play a guiding role and are overseen by regional structures.

The SADC RQF was established as a ten-level reference framework in 2011 and launched in 2017. Its implementation process is owned and driven by the member states of the region. The SADC RQF has well-developed level descriptors, based on learning outcomes, with three domains of knowledge, skills, and autonomy and responsibility. A strategy has also been adopted to utilise national capacities and regionally coordinated government funding to strengthen capacity for coordination and implementation of the SADC RQF at regional level (SADC TCCA, 2018). Member states, particularly TCCA members, volunteered to augment the capacity of the SADC Secretariat by providing administrative support on a rotational basis using their capacities (human, technical expertise and funding) in the absence of an implementation unit to drive the implementation of the SADC RQF on a daily basis. A qualifications portal was developed in 2016–17, but was not completed at the time, mainly due to a lack of resources to sustain its development, but also restricted by the available platform software at the time.

A set of quality assurance guidelines were developed in 2017, which led to the establishment of the Southern African Quality Assurance Network (SAQAN) and the Southern African Association for Educational Assessment (SAAEA). The SADC Qualifications Verification Network (SADCQVN) has also been established as a regional platform to enable experts responsible for verification of qualifications to communicate and cooperate on verification matters, to ensure trust and credibility of qualifications in the region. This network is a member of the African Qualifications Verification Network (AQVN), which shares the common goal of ensuring that African qualifications can be trusted. A SADC Recognition Manual is currently being developed to standardise the verification of qualifications across the region. Furthermore, an e-certificate is being piloted to speed up delivery to clients, reducing waiting periods for evaluation of qualifications to enable quicker application outcomes for further learning or for visas, and to reduce misrepresented and fraudulent qualifications. To date, four countries (Botswana, Namibia, South Africa and Zambia) are piloting the e-certificate. Indicators for the SADC RQF have been developed, coordinated by the Technical Committee on Education Management Information System (TCEMIS). SADC envisages the revival and further development of a SADC Qualification Portal, with data and information on qualifications and skills, covering qualifications both internally and externally acquired.

The East African Qualifications Framework for Higher Education (EAQFHE) is being developed to facilitate the mobility of professionals in the EAC, based on the undertaking from partner states to sign a Mutual Recognition Agreement (MRA) between competent recognition authorities for the regulation of professions. By 2019, MRAs had been signed for accountants, architects, engineers and veterinarians. Negotiations of MRAs for land surveyors and the advocates of East Africa have been concluded and are waiting for signature. The overall mandate over the EAQFHE rests with the IUCEA, which is the custodian and governing body, delegated by the EAC. Monitoring of the framework is being done by the IUCEA, to be reported to the EAC. The monitoring system uses a scorecard, which covers a number of actions that the EAC is undertaking and which are shared with representatives of the partner states of the EAC. The key stakeholders of the EAQFHE are the higher education bodies in the member states and the respective ministries of education. Earlier, the ECOWAS ministers of education adopted guidelines and a roadmap for the ECOWAS RQF in October 2012.

Several other Africa-wide initiatives have been listed in this mapping report. Some of these initiatives are at the strategic level (such as CESA and Agenda 2063), while others are very focused on specific sectors, such as the African Higher Education and Research Space (AHERS), Pan-African Quality Assurance and Accreditation Framework (PAQAAF). In addition to examples such as the AQVN mentioned above, Conseil Africain et Malgache pour l'Enseignement Supérieur (CAMES) also stands out as an important and longstanding regional initiative that the ACQF process is already considering. CAMES's Programme on Recognition and Equivalence of Diplomas (PRED) and Quality Assurance Programme (PAQ) together contribute to a framework of qualifications in higher education based on harmonised quality assurance principles, and instruments across the nineteen countries engaged with CAMES.

#11 The relationships between NQFs, RQFs and the potential ACQF

The SADC RQF and EAQFHE are well underway, and the Intergovernmental Authority on Development (IGAD) and ECOWAS seem to be following with RQF ambitions of their own. The mapping study has highlighted the fact that the interplay between these emerging RQFs, the various NQFs across Africa and the proposed ACQF will be a critical factor for future work in this area, a view supported by the International Labour Organisation:

A natural complement for a continental or even regional Qualifications Framework is the presence of National Qualifications systems which can refer to the general framework. The ideal solution is to have a National Qualifications Framework (NQF) in each member country, facilitating the recognition of degrees, certificates and diplomas and allowing the comparability and transparency within the education areas, but the situation worldwide is quite diversified. Financial, political, social conditions influence the creation of an NQF (ILO, 2015, p. 64).

The mapping study has highlighted the fact that the interplay between these emerging RQFs, the various NQFs across Africa and the proposed ACQF will be a critical factor for future work in this area. While NQFs are quite distinct in their orientation and purpose, it is the potential overlap, cooperation and complementarity between the RQFs and the ACQF that need a foundation based on a shared vision, acknowledgement of specific key regional interests and goals, and consideration of economies of scale that is the main concern. Dialogue, consultation and trust building will be essential in shaping the priority functions and operational modes of the ACQF towards NQFs and RQFs in Africa. Of importance also is a future-oriented vision, in which new learning, new types of certificates and awarding tools are part of the menu for every qualifications reform and framework. While these options are drawn from the findings of this mapping study, as well as international trends, they are subject to more interpretation and consultation. Other continental frameworks being developed, such as for teacher qualifications (Nwokeocha, 2019), and even the Continental Teacher Mobility Protocol (CTMP) (UNESCO IICBA, 2019), to mention two examples, will also need to be considered.

CESA 16–25 priority objective 4 (c and d) provides the political vision and foundation for the wide scope of the ACQF in its interrelations with regional and national qualifications frameworks on the continent. The findings of this mapping study and ongoing peer exchanges with RECs and national level (NQF) authorities supply evidence supporting the ACQF's development options for effective, sustainable and pertinent cooperation with the existing RQFs on the continent and with RQFs involving African NQFs (such as the Arab Qualifications Framework, AQF). The concrete objectives, modalities and legal format of the interrelations between continental, regional and national levels will be the subject of political deliberations and technical and organisational analysis.

The advantages and disadvantages of each scenario must be carefully unpacked and, critically, the process of reaching some form of consensus should be done through social dialogue. Building trust during this process will be essential to ensure that the implementation of the model can be done in a sustainable, constructive and coordinated manner.

#12 Legal and policy foundations for RQFs: Getting the balance right

RQFs across the world are closely tied to regional conventions and protocols. These international normative instruments are mostly based on voluntary participation and have extremely limited enforceability. Depending on the model of ACQF that is preferred in Africa, the supporting policies may need to be adjusted and/or developed. In the broader African context, Agenda 2063, and its First Ten-Year Implementation Plan (2013–2023), CESA, AfCFTA, the Continental TVET Strategy, and the Protocol to the Treaty Establishing the African Economic Community Relating to Free Movement of Persons, Right of Residence and Right of Establishment provide the foundation for what the ACQF may become. Of critical importance is the Revised Convention on the Recognition of Studies, Certificates, Diplomas, Degrees and Other Academic Qualifications on Higher Education in African States (UNESCO, 2014c). Many complementary initiatives

underway, many in higher education, further expand on this foundation. The question will really be about the form the ACQF takes: a traditional overarching framework, or a framework with novel functions and interactions with national and regional frameworks in their diverse forms.

#13 Governance of RQFs: The link to RECs and the AUC

A persisting issue concerns the capacity of RECs to develop and implement regional qualifications. Do RECs have the capacity to sustain the level of funding and effort to fully implement a qualifications framework across their regions? The current situation certainly only allows for slow progress. The SADC RQF is a case in point, having first been considered in 2011. The technical support required for qualifications framework development, across national, regional and continental levels, is an area that requires serious consideration for any of the models outlined above to be successful.

5.3.3 Considerations for the future

As the mapping report draws to a close, there are two important future considerations that the mapping study has highlighted. These are briefly elaborated below.

#14 A case for differentiated support to countries

African member states are clearly at different levels of NQF development. This is sometimes linked to a country's overall state of economic development, or its size, or geographical location, but there is not always a direct correlation. We have seen that island states, such as Seychelles, Mauritius and Cape Verde, have made great strides with their NQFs, while large economies such as Nigeria, Kenya and South Africa are all at different stages of NQF development. Countries associated with more capacitated RECs, such as in SADC, the EAC and ECOWAS, seem to be advantaged. We have also seen that continentally, higher education is more organised than TVET and general education. At a high level, five groupings of countries can be considered, each with a mix of specific needs (see Table 1 at the start of this publication).

#15 Sustainability and the harmonisation of qualifications in Africa

Much was said about sustainability before the Covid-19 pandemic, but this seems to have been overtaken by more immediate concerns. As a continent and a global community, we must return to these imperatives and carefully consider what the harmonisation (comparability, transparency, mutual understanding) of qualifications in Africa would look like when viewed through the lens of sustainable development:

As lifelong learning aims at learning for oneself, for others and for the planet, it also has a key role in driving sustainability. Lifelong learning is about the sustained and sustainable freedom of individuals, linking social freedom to environmental responsibility (UIL, 2020, p. 14).

Africa, with its strong youth dividend, is poised to grow economically in the future and even overtake other continents that have long been more developed. A harmonisation strategy for Africa, whatever form it takes, must be environmentally and economically sustainable. If the ACQF is to become a new-generation framework, sustainability will be integral to its design, as much as its digital orientation (ILO, 2020b; UIL, 2020).

5.4 Concluding remarks

It may be too early to draw lessons from the emergent automation of similar processes, as is taking place for ESCO and the WRLs (Hart & Chakroun, 2019), but it will be important for the ACQF process to carefully interrogate progress made. The ACQF is well positioned to be the first of a new generation of qualifications frameworks. There is an opportunity for the ACQF to set the global benchmark for a new-generation qualifications framework based on a convergence of recognition methodologies, a move towards digitalisation, a greater level of interoperability, and the realisation of independent reference points (ILO, 2020b). Covid-19 is acting as an accelerator for these processes, and what may have previously been developed in five to ten years could now be done in a few months (ADEA, 2020; QQI, 2020). The recent report on the future of lifelong learning certainly underscores the findings of this mapping report, including the importance of the individual and valuing lifelong learning as a human right:

Addressing the challenges of the twenty-first century and shaping a sustainable future for democratic societies calls for valuing lifelong learning as a new human right. This has implications for the international community, including UNESCO, and for countries, especially concerning the establishment of a legal framework for lifelong learning ... Reconceptualizing lifelong learning and its organization within a learning ecosystem from the perspective of learners and their pathways along and across the life course is the essential starting point in achieving this societal shift (UIL, 2020, p. 39).

The ACQF has the potential to infuse this learning ecosystem approach, from a learner perspective, and to become a de facto legal framework for Africa. Time will tell if the continental leaders will embrace this opportunity. If this is truly time for an integrated, prosperous and peaceful Africa, then countries, RECs and the AUC need to have the courage to own and operationalise the ACQF, learning from the issues that have hampered progress of RQFs in Africa and elsewhere. The ACQF is African and can set a new global standard. This is within Africa's reach.

Annexure 1: African member states and regional economic communities

Country	RECs				Official language
Algeria	AMU				French
Angola	ECCAS	SADC			Portuguese
Benin	CEN-SAD	ECOWAS			French
Botswana	SADC				English
Burkina Faso	CEN-SAD	ECOWAS			French
Burundi	COMESA	EAC	ECCAS		French
Cameroon	ECCAS				French
Cape Verde	CEN-SAD	ECOWAS			Portuguese
Central African Republic (CAR)	CEN-SAD	ECCAS			French
Chad	CEN-SAD	ECCAS			French
Comoros	COMESA	CEN-SAD	SADC		French
Congo, Democratic Republic of the	COMESA	ECCAS	SADC		French
Congo, Republic of the	ECCAS				French
Djibouti	COMESA	CEN-SAD	IGAD		French
Egypt	COMESA	CEN-SAD			Arabic
Equatorial Guinea	ECCAS				French
Eritrea	COMESA	CEN-SAD	IGAD		English
Eswatini (formerly Swaziland)	COMESA	SADC			English
Ethiopia	IGAD				English
Gabon	ECCAS				French
Gambia, The	CEN-SAD	ECOWAS			English
Ghana	CEN-SAD	ECOWAS			English
Guinea	CEN-SAD	ECOWAS			French
Guinea-Bissau	CEN-SAD	ECOWAS			Portuguese
Ivory Coast	CEN-SAD	ECOWAS			French
Kenya	COMESA	CEN-SAD	EAC	IGAD	English
Lesotho	SADC				English
Liberia	AMU	CEN-SAD	ECOWAS		English
Libya	COMESA	CEN-SAD			Arabic

Country	RECs			Official language
Madagascar	COMESA	SADC		French
Malawi	COMESA	SADC		English
Mali	CEN-SAD	ECOWAS		French
Mauritania	AMU	CEN-SAD		French
Mauritius	SADC	COMESA		French
Morocco	CEN-SAD			French
Mozambique	SADC			English
Namibia	SADC			English
Niger	CEN-SAD	ECOWAS		French
Nigeria	CEN-SAD	ECOWAS		English
Rwanda	COMESA	EAC	ECCAS	English
Sahrawi Arab Democratic Republic (SADR)				Arabic
Sao Tome and Principe	CEN-SAD	ECCAS		Portuguese
Senegal	CEN-SAD	ECOWAS		French
Seychelles	COMESA	SADC		French
Sierra Leone	CEN-SAD	ECOWAS		French
Somalia	COMESA	CEN-SAD	IGAD	Arabic
South Africa	SADC			English
South Sudan	EAC	IGAD		Arabic
Sudan	COMESA	CEN-SAD	IGAD	Arabic
Tanzania	AMU	EAC	SADC	English
Togo	CEN-SAD	ECOWAS		French
Tunisia	COMESA	CEN-SAD		Arabic
Uganda	COMESA	EAC	IGAD	English
Zambia	COMESA	SADC		English
Zimbabwe	COMESA	SADC		English

Annexure 2: Sources and definitions

The definitions below are drawn from wide range of sources, but four useful sources that can be accessed online are listed below.

ACQF inventory	The ACQF inventory has been developed as part of the mapping study and contains all the available sources that the research team could find. The inventory is housed temporarily on Google Drive.	ACQF inventory
NQFpedia	This glossary of terms developed by the South African Qualifications Authority (SAQA) provides a comprehensive list of the most up-to-date terms used in the National Qualifications Framework (NQF) environment. It is available as a PDF and as an interactive facility on the SAQA website where comments can be made on existing definitions and new ones proposed.	NQFpedia
TVETipedia	The TVETipedia Glossary is a collection of terms that are commonly used in the area of Technical and Vocational Education and Training. This glossary provides definitions and background information from various trustworthy sources.	TVETipedia Glossary
Terminology of European education and training policy	A glossary of key terms used in the validation of non-formal and informal learning.	Glossary of key terms

Adult education

Education specifically targeting individuals who are regarded as adults by the society to which they belong, to improve their technical or professional qualifications, further develop their abilities, enrich their knowledge with the purpose to complete a level of formal education, or to acquire knowledge, skills and competencies in a new field or to refresh or update their knowledge in a particular field. This also includes what may be referred to as 'continuing education', 'recurrent education' or 'second chance education'. <http://glossary.uis.unesco.org/glossary/map/terms/176>

African Continental Qualifications Framework

The ACQF is a policy initiative of the African Union and its development process has started. The current vision for the ACQF is: to enhance comparability, quality and transparency of qualifications from all sub-sectors and levels of education and training; facilitate recognition of diplomas and certificates; work in complementarity with national and regional qualifications frameworks; promote cooperation and alignment between qualifications frameworks (national and regional) in Africa and worldwide.

Alignment

The vision is that all new qualification certificates, diplomas and other documents issued by competent authorities will be recognised at a regional/continental level. Regional alignment would also enable institutions and individuals to make comparisons of their learning and competence levels and would reduce unnecessary duplication of learning and effort when moving across regions and the continent for study or work purposes (SADC Secretariat, 2017b).

Basic education

Education and training that takes place in primary and secondary schools, as well as in adult education and training centres. <https://hr.saqa.co.za/glossary/pdf/NQFPedia.pdf>

Basic skills

The skills needed to live in contemporary society – for example, listening, speaking, reading, writing and mathematics. https://www.cedefop.europa.eu/files/4064_en.pdf

Certificate

An official document, issued by an awarding body, which records the achievements of an individual following a standard assessment procedure. <https://www.voced.edu.au/vet-knowledge-bank-glossary-vet>

Continuing education

Various forms of education provided for adults, consisting of qualifications and part-qualifications, as well as short or part-time courses. <https://hr.saqa.co.za/glossary/pdf/NQFPedia.pdf>

Credential

Formal certification issued for successful achievement of a defined set of outcomes – for example, successful completion of a course in recognition of having achieved particular awareness, knowledge, skills or attitude competencies; successful completion of an apprenticeship or traineeship. [https://unevoc.unesco.org/home/TVET Forum](https://unevoc.unesco.org/home/TVET%20Forum)

Curriculum

The inventory of activities implemented to design, organise and plan an education or training action, including the definition of learning objectives, content, methods (including assessment) and material, as well as arrangements for training teachers and trainers. https://www.cedefop.europa.eu/files/4117_en.pdf

Diploma

An official document, issued by an awarding body, which records the achievements of an individual following an assessment and validation against a predefined standard. https://www.cedefop.europa.eu/files/4117_en.pdf

Distance learning

Also known as e-learning or online learning, it is a form of education in which teachers and students are physically separated. Various technologies such as Skype allow for teachers and students to interact and communicate. Traditional distance learning focused on individuals in remote areas and it used to be via mail. <https://www.oecd-ilibrary.org/>

E-learning

E-learning is an umbrella term that refers to the use of any digital device for teaching and learning, especially for delivery or accessing of content. Thus e-learning can take place without any

reference to a network or connectivity. The digital device used by the learner to access materials need not be connected to a digital network, either a local area network or to the internet (or even to a cell phone network if a tablet is used as a terminal or access device). <http://oasis.col.org/handle/11599/829/restricted-resource?bitstreamId=2757>

Education

The process by which societies deliberately transmit their accumulated information, knowledge, understanding, attitudes, values, skills, competencies and behaviours across generations. It involves communication designed to bring about learning. <http://uis.unesco.org/>

Education for sustainable development

Education for sustainable development (ESD) promotes efforts to rethink educational programmes and systems (both methods and contents) that currently support unsustainable societies. <https://en.unesco.org/>

Emerging skills

Abilities for which demand is increasing in existing or new occupations. https://www.cedefop.europa.eu/files/4117_en.pdf

Employability

The degree of adaptability an individual demonstrates in finding and keeping a job, and updating occupational skills; relates to portable competencies and qualifications that enhance an individual's capacity to make use of the education and training opportunities available in order to secure and retain decent work. [https://unevoc.unesco.org/home/UNEVOC Publications](https://unevoc.unesco.org/home/UNEVOC%20Publications)

Equivalence of certificates

International evaluation and official recognition of academic degrees and/or certificates and occupational qualifications. <http://www.voced.edu.au/glossary-vet>

Evaluation

Evaluation is the systematic and objective assessment of an ongoing or completed policy, plan or programme, including its design, implementation and results. It aims to assess the relevance and fulfilment of objectives and strategies with the intention of informing decision-making. 'Formative' evaluation relates to ongoing activities and helps guide implementation. 'Summative' evaluation assesses the results of a particular initiative, after completion. <https://unesdoc.unesco.org/ark:/48223/pf0000234819>

Formal education and training

Education or training provided in educational institutions, such as schools, universities, colleges, or off-the-job in a workplace, usually involving direction from a teacher or instructor. [https://unevoc.unesco.org/home/UNEVOC Publications](https://unevoc.unesco.org/home/UNEVOC%20Publications)

Formative assessment

A range of formal, non-formal and informal ongoing assessment procedures used to focus teaching and learning activities to improve student attainment, or which are required for the purpose of a year mark. <https://hr.saqqa.co.za/glossary/pdf/NQFPedia.pdf>

Gender equality

Boys and girls experience the same advantages and disadvantages in educational access, treatment and outcomes. In so far as it goes beyond questions of numerical balance, equality is more difficult

to define and measure than parity. The achievement of full gender equality in education would imply: equality of opportunities; equality in the learning process; equality of outcomes; and equality of external results. <http://glossary.uis.unesco.org/glossary/map/terms/176>

Guidance and counselling

A range of activities designed to help individuals make educational, vocational or personal decisions and carry them out before and after they enter the labour market. https://unevoc.unesco.org/home/UNEVOC_Publications

Higher education

Tertiary education that is of a higher academic level than secondary education, usually requiring a minimum level of admission and successful completion of secondary education. <https://unevoc.unesco.org/home/TVETipedia+Glossary/lang=en/filt=all/id=238>

Human capital

Knowledge, skills, competences and attributes embodied in individuals that facilitate personal, social and economic wellbeing. https://www.cedefop.europa.eu/files/4064_en.pdf

Informal learning

Learning resulting from daily activities related to work, family or leisure. It is not organised or structured (in terms of objectives, time or learning support). Informal learning in most cases is unintentional from the learner's perspective. It typically does not lead to certification. https://www.cedefop.europa.eu/files/4064_en.pdf

Informal sector

Part of the market economy in that it produces (legal) goods and services for sale or other forms of remuneration, covers informal employment both in informal enterprises (small unregistered or unincorporated enterprises) and outside informal enterprises; not recognised or protected under existing legal and regulatory frameworks. <https://unevoc.unesco.org/home/UNEVOC%20Publications>

Information and communications technology (ICT)

Technology that provides for the electronic input, storage, retrieval, processing, transmission and dissemination of information. <https://unevoc.unesco.org/home/UNEVOC%20Publications>

International qualifications

Qualifications awarded at international level, outside public authorities' jurisdiction. (These non-state qualifications are awarded by a range of bodies, organisations and multinational companies, representing a wide variety of stakeholders and interests.) <https://unesdoc.unesco.org/ark:/48223/pf0000242887>

Job

A job is a set of tasks and duties performed, or meant to be performed, by one person, including for an employer or in self-employment. Jobs are classified by occupation with respect to the type of work performed, or to be performed. <https://www.ilo.org/public/english/bureau/stat/isco/docs/resol08.pdf>

Job placement

Process of supporting individuals to find jobs matching their skills. https://www.cedefop.europa.eu/files/4117_en.pdf

Job specifications

The awareness, knowledge, skills, abilities and attitudes required by an individual to perform a job. <https://unevoc.unesco.org/home/TVET%20Forum>

Key competencies

The application of universal knowledge and skills across a range of social, work and geographical settings. (Key competences are also referred to as critical cross-field outcomes, transferable skills and core competences.) <https://unesdoc.unesco.org/ark:/48223/pf0000242887>

Key performance indicators

Indicators help an organisation define and measure progress toward organisational goals. Once an organisation has analysed its mission, identified all its stakeholders and defined its goals, it needs a way to measure progress toward those goals. Key performance indicators are those measurements. <https://www.voced.edu.au/vet-knowledge-bank-glossary-vet>

Know-how

Practical knowledge or expertise that includes technological and managerial components. <https://unevoc.unesco.org/home/UNEVOC%20Publications>

Knowledge

Knowledge is central to any discussion of learning and may be understood as the way in which individuals and societies apply meaning to experience. It can therefore be seen broadly as the information, understanding, skills, values and attitudes acquired through learning. As such, knowledge is linked inextricably to the cultural, social, environmental and institutional contexts in which it is created and reproduced. https://unesdoc.unesco.org/ark:/48223/pf0000232555_eng

Knowledge economy

An economy that is driven by ideas and knowledge, rather than by material resources, and in which the keys to job creation and higher standards of living are innovation and technology embedded in services and manufactured products. <https://unevoc.unesco.org/home/UNEVOC%20Publications>

Learning outcomes

Statements of what a learner knows, understands and is able to do on completion of a learning process, which are defined in terms of knowledge, skills and competence. Terminology of European education and training policy

Learning programme

The learning programme is a written document planning learning experiences in a specific learning setting. It is developed on the basis of the curriculum and takes into account the learners' needs. https://www.cedefop.europa.eu/files/5506_en.pdf

Level descriptor

A statement describing learning achievement at a particular level of the National Qualifications Framework (NQF) that provides a broad indication of the types of learning outcomes and assessment criteria that are appropriate to a qualification at that level. <https://hr.saqa.co.za/glossary/pdf/NQFPedia.pdf>

Lifelong learning

Learning that takes place in all contexts in life – formally, non-formally and informally. It includes learning behaviours and obtaining knowledge; understanding; attitudes; values and competencies for personal growth, social and economic wellbeing, democratic citizenship, cultural identity and employability. <https://hr.saqa.co.za/glossary/pdf/NQFPedia.pdf>

Module

A course or part of a course in the context of a modular programme. A module may be taken singularly or combined with other modules offered. <http://uis.unesco.org/>

Monitoring

Monitoring is the continuous and systematic collection of data on specific indicators in order to provide the main actors of an ongoing development intervention with indications as to the extent of progress and the achievement of objectives (in relation to allocated resources). <https://unesdoc.unesco.org/ark:/48223/pf0000234819>

National qualifications framework

An instrument for the development, classification and recognition of skills, knowledge and competencies along a continuum of agreed levels. It is a way of structuring existing and new qualifications, which are defined by learning outcomes – clear statements of what the learner must know or be able to do, whether learned in a classroom, on the job, or less formally. The qualifications framework indicates the comparability of different qualifications and how one can progress from one level to another, within and across occupations or industrial sectors (and even across vocational and academic fields if the NQF is designed to include both vocational and academic qualifications in a single framework). https://www.ilo.org/wcmsp5/groups/public/@ed_emp/@ifp_skills/documents/instructionalmaterial/wcms_103623.pdf

Non-formal education

Education that takes place outside the formal system on either a regular or an intermittent basis. <https://unesdoc.unesco.org/ark:/48223/pf0000029940>

Non-formal learning

Planned learning activities, not explicitly designated as learning, towards the achievement of a qualification or part qualification; often associated with learning that results in improved workplace practice. <https://hr.saqa.co.za/glossary/pdf/NQFPedia.pdf>

Occupation

The kind of work performed in a job. The concept of *occupation* is defined as a 'set of jobs whose main tasks and duties are characterized by a high degree of similarity'. A person may be associated with an occupation through the main job currently held, a second job, a future job or a job previously held. A *job* is defined in ISCO-08 as 'a set of tasks and duties performed, or meant to be performed, by one person, including for an employer or in self employment'. ISCO –International Standard Classification of Occupations

Online credential

The electronic representation of the different types of learning acquired and mastered by an individual (examples include the Europass CV, test-based credentials, online badges and online certificates). <https://unesdoc.unesco.org/ark:/48223/pf0000242887>

Online learning

Online learning is e-learning with a mandatory involvement of a digital network, which a learner needs in order to access at least part of the learning materials and services. Online learning refers to network-enabled teaching and learning that allows the learner to have increased interaction with content, teacher and other learners. <http://oasis.col.org/handle/11599/829/restricted-resource?bitstreamId=2757>

Open and distance learning

An approach to learning that focuses on freeing learners from constraints of time, space and place while offering flexible learning opportunities. It allows learners to work and combine family responsibilities with educational opportunities. https://www.sadc.int/files/3113/7820/8525/Approved_Regional_ODL_Policy_Framework_June_2012_1.pdf

Prior learning

The knowledge, know-how and/or competencies acquired through previously unrecognised training or experience. <https://unevoc.unesco.org/home/UNEVOC%20Publications>

Programme

A coherent set or sequence of educational activities designed and organised to achieve pre-determined learning objectives or accomplish a specific set of educational tasks over a sustained period. Within an education programme, educational activities may also be grouped into sub-components variously described in national contexts as 'courses', 'modules', 'units' and/or 'subjects'. A programme may have major components not normally characterised as courses, units or modules – for example, play-based activities, periods of work experience, research projects and the preparation of dissertations. <http://uis.unesco.org/>

Qualification

Planned combination of learning outcomes with a defined purpose or purposes, including defined, applied and demonstrated competence and a basis for further learning. https://www.academia.edu/4570148/The_Southern_African_Development_Community_Regional_Qualifications_Framework_Concept_Document

Quality assurance

Processes and procedures for ensuring that qualifications, assessment and programme delivery meet certain standards. https://www.ilo.org/wcmsp5/groups/public/@ed_emp/@ifp_skills/documents/instructionalmaterial/wcms_103623.pdf

Skills

A bundle of knowledge, attributes and capacities that can be learnt and that enable individuals to successfully and consistently perform an activity or task and can be built upon and extended through learning. <http://www.oecd.org/education/47769000.pdf>

Stakeholder

A person or organisation with an interest or concern in something. In vocational education and training, stakeholders include government, providers of training, industry, clients and the community. <https://www.tesda.gov.ph/uploads/File/RelatedTvetInfo/The%20TVET%20Glossary%20of%20Terms,%204th%20Edition.pdf>

Sustainable development

Development that meets the needs of current generations without compromising the ability of future generations to meet their needs. <https://www.voced.edu.au/vet-knowledge-bank-glossary-vet>

Sustainability

The concept of sustainability relates to the maintenance and enhancement of environmental, social and economic resources, in order to meet the needs of current and future generations. The three components of sustainability are: 1) environmental sustainability – which requires that natural capital remains intact. This means that the source and sink functions of the environment should not be degraded. Therefore, the extraction of renewable resources should not exceed the rate at which they are renewed, and the absorptive capacity of the environment to assimilate wastes should not be exceeded. Furthermore, the extraction of non-renewable resources should be minimised and should not exceed agreed minimum strategic levels; 2) social sustainability – which requires that the cohesion of society and its ability to work towards common goals be maintained. Individual needs, such as those for health and wellbeing, nutrition, shelter, education and cultural expression should be met; 3) economic sustainability – which occurs when development, which moves towards social and environmental sustainability, is financially feasible. <https://www.voced.edu.au/vet-knowledge-bank-glossary-vet>

Technical vocational education and training

TVET, as part of lifelong learning, can take place at secondary, post-secondary and tertiary levels and includes work-based learning and continuing training and professional development, which may lead to qualifications. TVET also includes a wide range of skills development opportunities attuned to national and local contexts. Learning to learn, the development of literacy and numeracy skills, transversal skills and citizenship skills are integral components of TVET. <https://unesdoc.unesco.org/ark:/48223/pf0000234137>

TVET institution

Any establishment providing Technical and Vocational Education and Training (TVET), including colleges, institutes, centres and schools. <https://unevoc.unesco.org/home/TVET%20Forum>

Validation of learning outcomes

Confirmation by a competent body that learning outcomes (knowledge, skills and/or competences) acquired by an individual in a formal, non-formal or informal setting have been assessed against pre-defined criteria and are compliant with the requirements of a validation standard. Validation typically leads to certification. https://www.cedefop.europa.eu/files/4064_en.pdf

Youth

The United Nations General Assembly defined 'youth' as those persons falling between the ages of 15 and 24 years inclusive. This definition was made for International Youth Year, held around the world in 1985. All United Nations statistics on youth are based on this definition, as illustrated by the annual yearbooks of statistics published by the United Nations system on demography, education, employment and health. <https://unevoc.unesco.org/home/TVETipedia+Glossary/lang=en/char=all>

Annexure 3: Examples of African harmonisation initiatives

Africa Federation of Teacher Regulatory Authorities (AFTRA) is an intergovernmental organisation of the national agencies regulating teaching in the 55 African countries. It has, over the years, grown into a continental federation that drives policy formulation, coordination and implementation for the professionalisation of teaching in Africa. AFTRA is also a member of the International Forum of Teaching Regulatory Authorities and the International Task Force on Teachers for Education 2030. In pursuit of its mandates, AFTRA further functions as a member of the African Union's Continental Education Strategy for Africa (CESA 2016–2025) Teacher Development Cluster and collaborates with UNESCO regional offices, UNESCO-IICBA, Education International and others.

African Quality Rating Mechanism (AQRM) has established an African system that will ensure the performance of higher education institutions can be compared against a set of common criteria to help the institutions carry out self-evaluation exercises to support the development of institutional cultures of quality.

All-Africa Student Union (AASU) is the largest student movement in Africa and a dominant force on the continent and beyond. The AASU organises all students in Africa – from the basic level to institutions of higher learning; in essence, the AASU is the umbrella organisation for all students of Africa. www.aasuonline.org

Arab Network for Quality Assurance in Higher Education (ANQAHE) has a mission to ensure and strengthen quality assurance in higher education institutions of the Arab region and to enhance cooperation between similar quality assurance bodies or organisations in the Arab region and other regional and international quality assurance organisations. www.anqahe.org

Association of African Universities' (AAU) mission is to enhance the quality and relevance of higher education in Africa and strengthen its contribution to Africa's development. www.aau.org

Association of Arab Universities (AARU) is a non-governmental organisation that has an independent legal character. Its membership includes 240 Arab universities at the present time. <http://aaru.edu.jo>

Conseil Africain et Malgache pour l'Enseignement Supérieur (CAMES) contributes to harmonising the policies of higher education and research in the CAMES community, which consists of nineteen member states (in West and Central Africa, and Madagascar). CAMES contributes to this mission as a regional agency of quality assurance, accreditation and qualification. Among the nine programmes of CAMES, the most pertinent for the domain of qualifications are: Programme of Recognition and Equivalence of Diplomas (PRED); Inter-African Consultative Committees (CCI); Concours d'Aggregation and the Quality Assurance Programme (PAQ). www.lecames.org

Continental Education Strategy for Africa (CESA) has ambitious strategic goals related to qualifications frameworks (national, regional and continental) and a comprehensive framework for monitoring and evaluating their implementation.

East African Higher Education Quality Assurance Network (EAQAN) is a network of quality assurance practitioners in the East African Community (EAC) partner states. EAQAN provides training to quality assurance coordinators within the region as part of the capacity building process to strengthen the internal quality assurance systems in universities in East Africa. <http://eaqan.com>

Harmonisation of African Higher Education Quality Assurance and Accreditation (HAQAA) is an initiative, funded by the European Union in partnership with the African Union. HAQAA seeks to support African partners in developing a harmonised quality assurance and accreditation system at institutional, national, regional and pan-African levels. <https://haqaa.aau.org>

Intra-Africa Academic Mobility (IAAM) supports higher education cooperation between countries in Africa. The scheme aims to promote sustainable development and ultimately contribute to poverty reduction by increasing the availability of a trained, qualified, high-level and professional workforce in Africa. The programme's objective is to improve the skills and competences of students and staff through enhanced mobility between African countries. Strengthening cooperation between higher education institutions in Africa will increase access to quality education and encourage and enable African students to undertake postgraduate studies on the African continent.

Intra-Africa Academic Mobility Scheme is set up under the Pan-African Programme (Development Cooperation Instrument) and is based on the experience of the Intra-ACP Academic Mobility Scheme.

Inter-University Council of East Africa (IUCEA) was enacted by the East African Legislative Assembly in 2009 to facilitate networking among universities in East Africa, and with universities outside the region; to provide a forum for discussion on a wide range of academic and other matters relating to higher education in East Africa; and facilitate maintenance of internationally comparable education standards in East Africa, so as to promote the region's competitiveness in higher education. <https://iucea.org>

Pan-African Institute for Education for Development (IPED) is a specialised institution of the African Union, tasked with the responsibility to function as Africa's education observatory. This is a central role in ensuring quality, responsive and inclusive education development in Africa based on sound, accurate and timely information, to meet the individual and collective goals for the development of human resources and intellectual capacity in Africa.

Pan-African Quality Assurance and Accreditation Framework (PAQAF), which the AUC has endorsed via its committees and its Council, is an overriding framework for a number of commitments related to quality assurance activities in Africa. The implementation of the Addis Convention and AQRM are part of it, as are commitments to implement African Standards and Guidelines for Quality Assurance, an African Credit Transfer System and a continental register for quality assurance agencies and national bodies. As many aspects of PAQAF have not yet been developed, the HAQAA initiative is seen as a means to contribute to its implementation. www.edu-au.org/programs/176-au-higher-education-program

Southern African Development Community Technical Committee on Certification and Accreditation (SADC TCCA) is made up of nominated qualifications and quality assurance experts from SADC member states with support from the SADC Secretariat.

Southern African Quality Assurance Network (SAQAN) is a regional body that brings together quality assurance bodies and higher education institutions from the SADC region to promote higher education, foster harmonisation of quality systems in the region and beyond; and facilitate international recognition of higher education qualifications from the region to enhance mobility of staff and students. www.saqan.org

Southern African Regional Universities Association (SARUA) is a membership-based association of vice chancellors of public and private universities in the Southern African Development Community (SADC). SARUA enables collaborative networks and partnerships that develop the institutional and human capacity of the region's universities in order to make a distinctive contribution to regional development and integration. www.sarua.org

Annexure 4: Innovative financing mechanisms

Mechanism	What it is	When to consider it	Education issues it addresses
Education bonds	An investment in a debt, whereby the investor receives a fixed return on the principal and interest of the underlying security, which can be secured on the basis of any future revenue streams. Bonds can be issued by national governments as domestic bonds or by multilateral financial institutions as thematic bonds.	To generate future revenue streams. When there is a relatively mature bond market. When there is need for an upfront capital outlay. For countries willing to raise bonds for education sector projects.	Development of large infrastructure projects like school buildings, teacher education institutions, ICT equipment and connectivity.
Results-based financing (RBF)	At least part of the payment to a service provider by the results funder is contingent upon achieving pre-determined results/outcomes. This is a departure from traditional funding arrangements that pay for inputs and activities. Outcomes-based financing and loan buy-downs are RBF instruments.	When incentivising service providers and allowing flexibility in the delivery of an intervention is likely to improve results.	Improving access to education and learning outcomes.
Risk financing	Transfer of disaster or political risk to the market in the form of disaster insurance, catastrophe bonds or the catastrophe deferred drawdown option.	When the likelihood of natural disasters in a country is high and there is an existing risk, insurance facility set up to keep costs down.	Natural disaster post-recovery education interventions.
Global solidarity levies	Levies imposed on global economic activity to pay for global public goods including education, health and security.	End-users or consumers are willing to pay 'a small tax on a high-volume product or service'.	Any issue
Remittances	Remittances for education amplified by government or donor incentives or by labelling as for education.	Countries have a large volume of remittances, which is the case with most low- and middle-income countries whose skilled workforce seeks employment in other countries.	Any issue

Mechanism	What it is	When to consider it	Education issues it addresses
Corporate levies	Taxes paid by corporates as part of doing business.	There is an enabling tax system and sectors being lobbied to make a social contribution.	Any issue although skills for employment could be attractive for corporates.
Debt swaps	Debt relief entailing forgiveness of debt by the creditor conditional to the debtor committing specific funding for specific developmental projects.	When there is available debt for conversion or creditor(s) ready to cancel debt. Debt swaps will be critical for post Covid-19 recovery efforts.	Any issue
Diaspora bonds	A debt instrument that can raise financing from a country's citizens living abroad.	When countries have a large diaspora community and a relatively mature bond market and a revenue stream to repay the bond-holder.	Provision of upper secondary, higher education and youth training.
Crowdfunding	When citizens contribute to a particular project, usually via an online platform.	For emergencies like Covid-19 to raise relief funding. The education need has to be presented in a way that appeals to consumers and people who believe in the cause.	Any issues including education emergencies.
Public-private partnerships (PPPs)	A contract between a private party and a government entity to provide a public asset or service. The private entity has responsibility for raising the funding, carries the risk and management of the delivery of the service or the good.*	When the government is willing to collaborate with the private sector and there is private sector interest in working with government to achieve agreed-upon developmental goals.	Can be in any issues but mostly infrastructure projects.

Source: Adapted from Bellinger et al. (2016) in Mawoyo et al. (2020)

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